

# **Composing Playlists, Conducting Streams: The Life of Classical Music in the Internet Age**

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## **Abstract**

Will Boone: Composing Playlists, Conducting Streams: The Life of Classical Music in the Internet Age  
(Under the direction of Mark Katz)

By focusing on classical music recordings and new ways in which they are disseminated and listened to, this paper examines the role of the internet in the changing relationship between classical music and its listeners. Despite frequent assertions by journalists and critics that classical music is dead or dying, the internet provides much evidence that it is, in fact, thriving. Taking this vitality as a starting point, I argue that the nature of classical music's relevance is being redefined. The forces of eBusiness, technology, and musical taste are changing the very notion of what it means to be a classical music listener. In order to better understand the cultural significance of these changes I put them into an historical and musical context using two websites, Pandora.com and eClassical.com, as case studies.

## Acknowledgments

I must acknowledge, first and foremost, my parents for limitless love, support, and encouragement. There are no words to describe a blessing of the magnitude that my family has been for me. Next, I thank Carrie for her many kind words and constant reminding not to miss the forest for the trees.

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Finally, I offer gratitude to the many teachers I have had, both inside and outside of institutions, who have shown me the way towards the many wonderful places where music intersects with the convulsions of life.

Oh yes, one more thing... inconsistent inspiration was provided by Lurno (a.k.a. Baby Atomic).

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## **Introduction**

Classical music is not dead.<sup>1</sup> Nor will it be anytime soon. Despite a steady flow of writing taking the music's death as its premise – books posing as desperate attempts to “save” classical music; articles pointing out how nobody cares about “serious” music anymore; essays lamenting the music's imminent demise – classical music is alive and well.<sup>2</sup> Yet classical music, like all living things, is always changing. The purpose of this paper is not to argue against those who claim that classical music is dying, but rather to acknowledge that the music is changing and examine the nature of that change. Doing so allows us to engage with and appreciate classical music, not merely as something that needs to be preserved, but as a *living* art.

The locus of much of classical music's change is the internet. The internet has opened up worlds of possibilities for music, altering the way it is disseminated, listened to, thought about, purchased, and discussed. It is proving to be especially important for classical music. Speaking about his new position with the London Philharmonia, conductor Esa-Pekka Salonen said in a press conference in 2008:

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<sup>1</sup> For the purposes of this paper “classical music” refers to the many musics of the Western art tradition, especially those commonly taught in universities as an integral part their of music curriculums.

<sup>2</sup> Examples of writing dealing with the theme of the death of classical music abound: Norman Lebrecht's *Who Killed Classical Music: Maestros, Managers, and Corporate Politics* (Secaucus, NJ: Carol Publishing Group, 1997) details the death of the classical music industry; Julian Johnson's *Who needs Classical Music?: Cultural Choice and Musical Value* (Oxford; New York: Oxford University Press, 2002) claims that the music is dying because of a general decline in the public's cultural sophistication; Gene Weingarten's much discussed and Pulitzer Prize winning *Washington Post* article based on his Joshua Bell stunt (“Pearls Before Breakfast,” 8 April 2007, p. W10) attempts to make a point similar to Johnson's. Weingarten got the famous violinist to agree to pose as a busker in the entranceway to a Washington DC Metro station during the morning rush hour. Most people paid no attention to the music he played. For further reading about the death of classical music, see the *ArtsJournal*'s “Deathwatch” archive which contains links to over 50 articles - <http://www.artsjournal.com/issues/deathofclassical.htm>.

To have a strong presence on the internet, whether we like it or not... it is a necessity. If we want to exist... in the *minds* of people today, we *have* to be there.<sup>3</sup>

There are many ways in which the internet affects classical music – from facilitating easy purchase of concert tickets to allowing a composer to download sounds that will be incorporated into a new electronic work. Certainly, they cannot all be accounted for in one paper. My focus, in this project, is directed primarily towards classical music recordings, the details of their dissemination, and the people who listen to them. I have organized my examinations around three general and overlapping themes which will be explored through two case studies.

1. Classical Music and Technology
2. Classical Music and “eBusiness”
3. Classical Music and changing musical tastes

I am seeking to understand the impact of these three themes on the way classical music recordings are listened to, thought about, experienced, and perceived. It is my contention that there exists a substantial and growing audience for classical music made up of people who come to the music with a set of values and preconceived notions different than that of the traditional image of the classical music listener – erudite and a bit pretentious with strongly defined likes and dislikes. This new class of listeners is more willing to experiment, less interested in a sense of tradition, and more interested in “music as music” than in music as something that confers cultural status. Doubtless broad claims such as these are hard to substantiate, but throughout the examinations of my case studies I will provide evidence that points strongly in the direction of these trends. In the end, I will not argue that the changes

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<sup>3</sup> Esa-Pekka Salonen, 7 February 2008. Video footage available in the London Philharmonia’s podcast archive [http://www.philharmonia.co.uk/thesoundexchange/backstage/podcasts/esa-pekka\\_salonen\\_interview/](http://www.philharmonia.co.uk/thesoundexchange/backstage/podcasts/esa-pekka_salonen_interview/).

classical music and its listeners are undergoing are fundamentally positive or negative, only that any true attempt to understand classical music in a contemporary context must take these changes into account. By way of introduction, I will provide a brief outline of my three main themes and their significance to my two case studies.

With regards to music and technology, the idea of a database is fundamental to both case studies. The first study examines Pandora.com, a “free online personalized radio service.”<sup>4</sup> The service does not operate like traditional radio where a number of listeners tune in to the same broadcast, but rather allows each individual listener to create unique stations. This is facilitated by a huge database of digital music files. I will look into the nature of this database, how music is selected for inclusion, how it is processed, and how the database is used to deliver personalized streaming audio. I will consider the implications of subjecting classical music to such a process, viewing the situation from the angle of both the “processor” and the listener. Another site’s use of a database will be explored in the next case study. eClassical.com, an online retailer that focuses exclusively on digital downloads of classical music, makes use of virtual space in a way that classical retailers operating in physical space simply cannot. This allows users to find a wealth of information on the site easily and perform searches based on numerous criteria – possibilities for listeners that can, as I argue, affect their perceptions of and relationships with classical music.

The MP3 is another technological innovation whose presence pervades this project. A digital music format that is revolutionizing the music industry, the MP3 has proven so convenient for consumers that sales of physical recordings (mainly CDs) are declining every year while sales of digital downloads continue to rise steadily. Although the MP3 is

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<sup>4</sup> Tim Westergren, “Viewer Mail #1,” *Pandora Blog* (18 March 2008) accessible online at [http://blog.pandora.com/pandora/archives/2008/03/viewer\\_mail.html#comments](http://blog.pandora.com/pandora/archives/2008/03/viewer_mail.html#comments).



absolutely crucial to the very existence of Pandora, broadcasting classical music in this format raises a number of issues. I will consider sound quality, the problematic designation of classical music “tracks,” ineffective labeling systems, and others. The MP3 will also figure prominently in the discussion of eClassical, a company whose business model is founded on the existence of this music format.

There are a few different themes related to eBusiness that arise in conjunction with both Pandora and eClassical. Most importantly, perhaps, is an idea known as the “long tail theory.” The fullest statement of this theory is attributed to Chris Anderson, author of the book *The Long Tail: Why the Future of Business is Selling Less of More*.<sup>5</sup> Basically, within any market there are a few products that outsell everything else by a wide margin – and, then, there is everything else. This “everything else” is a gigantic list of goods only a small percentage of public is interested in buying. Anderson believes that, in the world of the internet, which allows for extremely low production, distribution, and storage costs, many successful businesses can be based on the selling of these “long tail” items. Amazon.com and Netflix are two successful businesses that exemplify how this theory works in practice. Of course, it is easy to see how the long tail theory has relevance for businesses that deal in classical music recordings. As the critic Alex Ross puts it:

...there are no hits in classical music. It's a niche market that is itself a vast conglomeration of sub-niches, from early music to the avant-garde, from Furtwängler fanciers to Toscanini types, none of whom ever agree. Collectively, however, they purchase many millions of records a year...<sup>6</sup>

We will see how both Pandora and eClassical operate within the precepts of the long tail theory, and how this affects what they can offer to listeners in terms of quality, price, and the

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<sup>5</sup> Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More* (New York: Hyperion, 2006)

<sup>6</sup> Alex Ross, “Dead or Alive: A ‘Rest is Noise’ Special Report” *The Rest is Noise* [blog] (22 March 2007) [http://www.therestisnoise.com/2007/03/dead\\_or\\_alive.html](http://www.therestisnoise.com/2007/03/dead_or_alive.html).

diversity and availability of their product. A new paradigm of “quality,” ushered in by the principles of the long tail theory, leads businesses to focus more on what is *relevant* to consumers than on traditional notions of quality (i.e. “best” orchestra, “best” conductor, “best” repertoire, “best” record label, “best” production value, etc.).<sup>7</sup> Certainly, this conception of quality is changing what listeners buy, how much they pay for it, and the implications (i.e. implications of refined taste, cultural status, education, etc.) of such a purchase. While the long tail theory is perhaps the most common presence when it comes to discussions of classical music and eBusiness, other issues will be dealt with as well in the body of the paper.

Finally, we come to that elusive phenomenon known as “musical taste.” While it is hard to define and harder still to measure, it is an essential element in the attempt to achieve an understanding of classical music and its listeners in the internet age. Overall, it seems those who listen to music are proving to be continually more diverse, unpredictable, and open to experimentation in the world of the internet. Even going back to the early 1990s, before the internet was a widely used, Richard Peterson and Robert Kern, two sociology professors from Vanderbilt, published the results of a study suggesting a major shift in tastes among well-educated upper/middle class citizens. Such people, Peterson and Kern argued, once gained cultural capital by exercising “snobbish” tastes; appreciating only a select few “highbrow” cultural expressions. Many of these former “snobs,” however, by the 1990s, had become “omnivores.” Cultural capital, in this new taste paradigm, was gained by having a wide knowledge of and appreciation for many diverse cultural expressions (from “lowbrow”

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<sup>7</sup> *Wired* magazine editor and author Chris Anderson has discussed these two dimensions of quality – relevance and “production value” – at some length. See Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More* (New York: Hyperion, 2006) especially 125-147; and “Is the Long Tail Full of Crap?” *The Longs Tail* (blog) (22 May 2005) [http://www.longtail.com/the\\_long\\_tail/2005/05/isnt\\_the\\_long\\_t.html](http://www.longtail.com/the_long_tail/2005/05/isnt_the_long_t.html).

to “highbrow” and all points in between).<sup>8</sup> Peterson and Kern’s study has proven prescient in a number of ways; certainly “omnivorousness” has become widely accepted, facilitated to a great extent by the easy access to information provided by the internet. And, as internet access becomes increasingly available and affordable, this omnivore paradigm is no longer merely the domain of the upper class. In fact, so many people have such easy access to such a diversity of content these days that the concept of “taste” itself seems to be disappearing. People still have their likes and dislikes, but it is harder to ascribe clear-cut meaning to these. Pop music critic Carl Wilson writes “distinctions in a culture that valorizes omnivorism [become] more fine-grained, fast-changing, and invidious.”<sup>9</sup> The notion of cultural capital becomes displaced by something more akin to “multicultural capital.”<sup>10</sup>

Both case studies, Pandora and eClassical, provide evidence of shifts in musical tastes. With Pandora we see how people are listening to classical music under different circumstances than in the past, in what could be considered a “pop music context.” There is much about the service and the experience it offers listeners that emphasizes the similarities between popular and classical music rather than the differences. Listeners even use the service to combine popular and classical music together on their own personalized radio stations, a fact whose significance I will delve into in the body of the chapter. At the same time, there is evidence that a portion of eClassical’s customer base has an open desire to experiment with classical music and discover pieces and composers with which they were

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<sup>8</sup> Richard A. Peterson and Roger M. Kern, *American Sociological Review*, 61/5 (Oct., 1996), pp. 900-907.

<sup>9</sup> Carl Wilson, *Let’s Talk About Love: A Journey to the End of Taste* (New York: Continuum, 2007) 97. Wilson’s book is an exploration of why such a polarity of musical taste (from extreme disgust to unyielding love) has grown up around the pop star Celine Dion. It is one of the most thoroughly researched and insightful discussions of musical taste I have encountered.

<sup>10</sup> This term, a play on Pierre Bourdieu’s often cited principle of “cultural capital,” comes from sociologist Bethany Bryson. See her article “‘Anything but Heavy Metal’: Symbolic Exclusion and Musical Dislikes,” *American Sociological Review* 61/5 (October 1996) 884-899.

previously unfamiliar. There are also indications that, despite being a retailer solely devoted to classical music, they have a substantial number of younger customers. The presence of active, musically open-minded, and young consumers points us towards the future and gives reason to consider the new ways in which classical music will be thought about, listened to, and incorporated into people's lives.

Before moving on, I want to provide a personal anecdote that reveals the roots of this project. I tell the story, not simply out of self-indulgence, but because I believe many similar stories could be told now and will be told in the future. Through its presence on the internet, classical music can easily reach people with a desire to hear it, some of whom might not have heard it otherwise, and, once this happens, its impact on their lives may potentially be momentous.

In 2001 I was beginning my first semester as a sophomore in college with no real sense of direction in life, and becoming increasingly bored with my declared biology major. I spent most of my time playing with a rock band and wearing thin my limited musical vocabulary discussing the intricacies of my favorite pop music recordings with band mates, friends, or anyone else who would listen. Though, at the time, I never considered music anything other than a hobby, I had a constant gnawing desire to learn more about it which led me to enroll in a music theory course and a music history class. I knew next to nothing about classical music and had never purchased a classical recording, but when I attended the first day of my music history class and the instructor played a recording of Palestrina's *Missa L'homme Arme*, I was *floored*; absolutely transfixed. I rushed home after class and searched for a recording of the work on Napster, downloaded it to my computer, and was listening to it in minutes. Napster, at the time, was a service that allowed any music existing in its network

to be downloaded for free. In those days, as a poor college student without a car, I would have never gone to the store and paid \$20 to purchase a classical CD. Through Napster, however, I built a personal library of classical music recordings. I experimented with composers whose works I had never heard such as Poulenc, Webern, and Bartók. I fell in love with some pieces, like the *Cavatina* from Beethoven's String Quartet in B flat, Op. 130, and listened to them again and again. By the end of the year I had changed my major to music and was working double time to catch up on all the musical knowledge I had been missing out on for too long. I do not necessarily want to say that "Napster changed my life," but the availability of classical music through the internet definitely had a major impact on my chosen direction. And I know it has affected and will continue to affect many lives other than mine.

Hence, I view the present topic as something much deeper than an interesting juxtaposition of the old (classical music) and the new (the internet); as something too important to be merely addressed with a passive comment, "isn't crazy how things change?" Classical music on the internet is not a novelty or a passing fad, but the reality of present day life. As such, it is critical that those involved with the music devote time to understanding what this means. I will use this paper to begin to do just that. My exploration of the significance of classical music's internet reality focuses on the forces acting on the music (taste, eBusiness, technology). While examining these forces, I also look at the ways in which people use the internet to find and experience classical music. I contend that a true understanding of classical music and its contemporary cultural context is dependent upon comprehending the ways in which the music is relevant today, for businesses and consumers

alike. We can use the examples of eClassical and Pandora to examine and interpret the nature of this relevance.

## **Pandora.com**

May 22, 2007: Tim Westergen, shaggy haired and clad in blue jeans and an untucked shirt, is addressing the crowd assembled at San Francisco's Museum of Modern Art. Standing at a slight lean he accompanies his measured speech with gentle hand gestures. Despite his laid back demeanor, the founder of Pandora.com cannot conceal his enthusiasm as he talks about the website's internet radio and music recommendation services. "I think we're on the cusp of something," he speaks thoughtfully. "We've sort of had a peek into what music is going to become, and the role that the right kind of radio can play in that. And it's one where you have an audience that is starting to participate (...) the listener becomes the center of gravity. Music is coming to find you based on your expressed musical preferences..."<sup>11</sup>

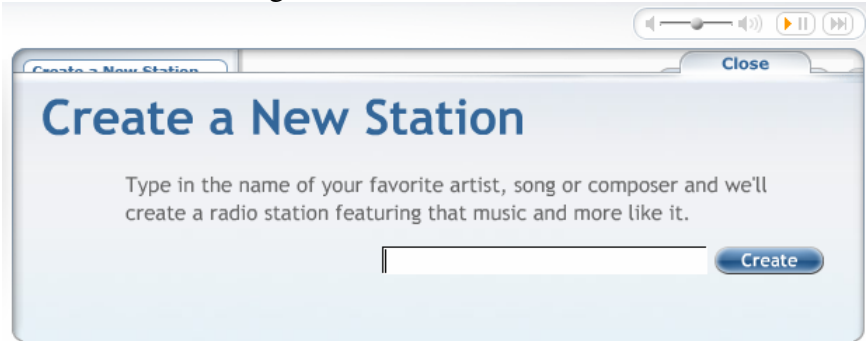
Pandora.com is a "free online personalized radio service that allows you to easily create radio stations based on songs and artists that you like."<sup>12</sup> Upon visiting the website a user will see the following prompt:

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<sup>11</sup> Tim Westergren, "Pandora Everywhere (1 of 5)," YouTube video posted by *radiopandora* (24 May 2007) accessible online at <http://www.youtube.com/watch?v=tSaXPebqcsG&feature=related>.

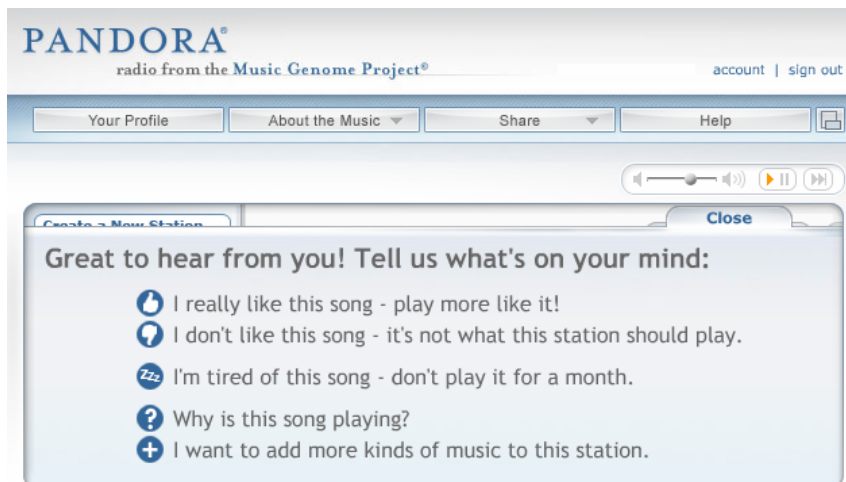
<sup>12</sup> Tim Westergren, "Viewer Mail #1," *Pandora Blog* (18 March 2008) accessible online at [http://blog.pandora.com/pandora/archives/2008/03/viewer\\_mail.html#comments](http://blog.pandora.com/pandora/archives/2008/03/viewer_mail.html#comments).

Type the name of your favorite artist, song or composer and we'll create a radio station featuring that music and more like it.



**Figure 1.1:** Pandora.com Opening Prompt

Simply by following these instructions one can create a “radio station.” This station will begin to play music that is related - *musically* related - to the initial station “seed” (the song or artist used to “launch” the station).<sup>13</sup> At any time, the listener can respond to the musical choices that the station makes. Clicking on a “thumbs up” icon expresses approval of the service’s selections; clicking on a “thumbs down” icon expresses disapproval (the station will not play that selection again). A listener can also skip over a particular selection (up to six per hour), or put it to “sleep” so the station will not play it again for one month.



**Figure 1.2:** Listener Feedback Prompt

<sup>13</sup> I take this terminology from Pandora.com. I will use the term “seed” throughout this chapter to refer to the name of a song/work, artist, or composer used by a listener to start a station.



Pandora's user-centered approach to internet radio has proven to be wildly popular. Since the site's launch in November of 2005 it has attracted some 9 million listeners. This statistic appears even more remarkable considering that Pandora does not advertise.<sup>14</sup> They do, however, make a concerted effort to interact with their users and take listeners' feedback into consideration. A constant exchange of ideas between those who run the site and those who use it is essential for the service to truly be "listener-centered" – or, as Tim Westergren puts it, to make the listener the "center of gravity." Thus, when I spoke to Westergren in the Spring of 2007, I asked him what kind of suggestions he most often heard from Pandora users. He answered quickly, "They want to hear classical music. You know, 'Mozart' is one of the most frequently used search terms on the site, and right now, it won't return any results."<sup>15</sup> However, that is no longer the case.

As of November 2007, Pandora took its classical music database online. Now, listeners can use the name of a composer or a classical work to create a station just as they would use the name of a rock band or title of a pop song. Suddenly, millions of listeners have access to streaming classical music on stations ostensibly geared directly towards their personal tastes. What are the implications of this? What can Pandora show us about the way classical music functions in contemporary society?

I will use this chapter to address these questions and then show how Pandora is situated within the technological, economic, and musical taste forces acting on classical music through the internet. There are three aspects of Pandora's approach to music that will be explored:

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<sup>14</sup> Pandora.com does utilize some search engine marketing – basically to ensure that the site will appear at (or near) the top of the list when someone performs a Google search for "pandora" or related terms.

<sup>15</sup> Personal correspondence (9 March 2007)

1. The way it collects, processes, and organizes data
2. *Who* collects, processes, and organizes this data
3. How this data is presented to its users

Ultimately, I will consider what this can tell us about the changes classical music and its audience are experiencing in the 21<sup>st</sup> century. First, however, some explanation is necessary.

### **The Music Genome Project**

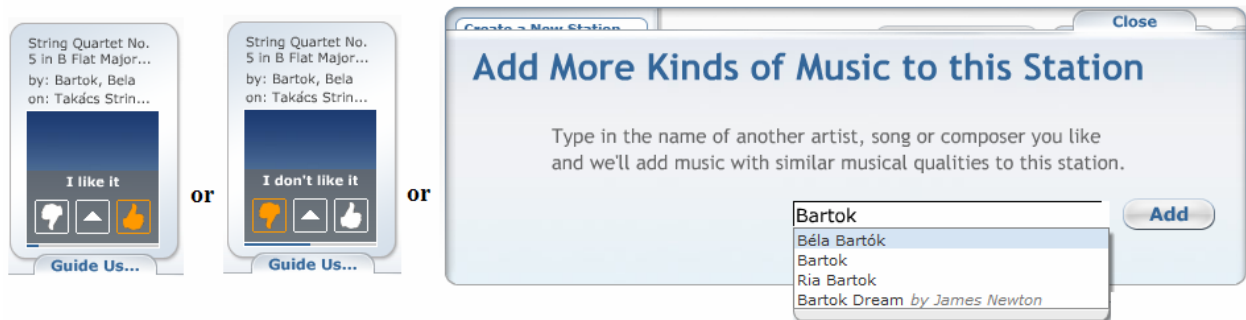
I would venture to say that these three words – “Music Genome Project” – play a significant role in Pandora’s success. They conjure up associations with the revolutionary and much publicized Human Genome Project – an international scientific endeavor that mapped the some 25,000 genes in the human genome, it is often touted as one of the great successes of contemporary science. Certainly, the formulation “Music Genome Project” imparts an air of scientific rigor and authority to Pandora’s service, and Tim Westergren’s story for how he came up with the idea fits right in.

Westergren tried for many years to make a living as a rock musician and a composer of film music. While working on studio recordings and films scores he was constantly confronted with the question – what is it, exactly, that gives a piece of music its distinctive sound? He found himself not only attuned to melody, harmony, rhythm, form, and instrumentation, but also to vocal technique, shades of vocal color, studio recording techniques, dynamics, timbral details, and many more components that contribute to any work’s overall aural affect. Struggling financially as a musician, he began to imagine other uses for his musical knowledge.

Around the turn of the millennium Westergren had an idea. He decided to combine information about musical details with new digital technologies, and, somehow, market the results. In the year 2000, the Music Genome Project was born. The project involved two major components – analyzing music and the creation of a database. Qualified employees were hired to begin chipping away at the vast endeavor of analyzing an ocean of recorded music. Individual songs were evaluated in terms of roughly 400 musical attributes. By rating the extent to which each of these attributes contributed (or did not contribute) to a piece of music’s overall sound, analysts were creating a unique profile for each piece – capturing the music’s “DNA,” so to speak. The results of these analyses were stored in a database. As they accumulated larger and larger amounts of data, Westergren and company attempted to market this information to a number of different companies (including Best Buy and Barnes & Noble), believing that it would be useful in helping such businesses make recommendations to their customers. However, these attempts proved, for the most part, unsuccessful. Eventually taking matters into their own hands, this group of entrepreneurs and musicians developed their own website – Pandora.com – and took it online at the end of 2005. This music-recommending internet radio service functions by utilizing the Music Genome Project.

When a user creates a station on Pandora by typing in the name of an artist, composer, or work, the system accesses a profile based on the data gathered from musical analyses. This profile is used to select other songs or pieces from the database that have similar profiles. Since each piece in the Music Genome has been analyzed according to around 400 attributes, one should end up with a stream of music closely related to the “musical reference point” used to start the station. A station can be “tuned” by adding more

music to its “definition” at any point, as well as by responding to the selections the service plays by clicking on “thumbs up” or “thumbs down.” (See **Figure 1.3** for illustrations of how this works. See also **Figure 1.2** above.) The site’s administrators hope that this will lead users not simply to enjoyable listening experiences, but also to the discovery of previously unfamiliar music.



**Figure 1.3:** “Tuning” a Pandora Station

Facilitating the discovery of music is perhaps the most important tenet of the “Pandora philosophy.” Tim Westergren goes so far as to call the discovery of new music “a religious experience,”<sup>16</sup> implying that finding moving new sounds can often result in a kind of ecstasy and a hopefulness for the future. And it is because of the Music Genome Project that music discovery through Pandora.com differs from other services on the internet. While there are a number of sites that provide recommendations for users, these recommendations are often based on the listening habits or purchasing preferences of other users or on designations of genre.<sup>17</sup> On the other hand, the Music Genome Project allows Pandora.com’s service to stream music based solely on musical characteristics. Therefore, at least in theory,

<sup>16</sup> Westergren, personal correspondence (9 March 2007).

<sup>17</sup> Amazon.com is one of the most well known music recommenders on the internet – their system is based entirely on what consumers buy (i.e. when one buys item ‘X’ the site recommends items ‘Y’ and ‘Z,’ because other customers who bought item ‘X’ purchased ‘Y’ and ‘Z’ as well). Last.fm is a music streaming service similar to Pandora that uses a system much like Amazon.com’s to recommend music to its users. Like with Pandora, listeners can create customized stations, but the music played on these stations is based on the listening habits of other Last.fm users. Musicoverly.com is another popular site that offers streaming music. Its selections are based on genre designations and time period.

any music in the website's database has an equal chance of being played on an appropriate station regardless of its popularity or the prior knowledge of this music among Pandora's usership. Genre labels given to recordings for retail purposes are not considered. Even if a particular recording would be filed in the "classical" section of a retail store, it could appear on a Pandora station based on music that would be filed in the "pop-rock" section of the same store *if* the recordings had similar musical characteristics.

Pandora's attempt to marry musical analysis and database technology in the interest of providing a "user-centered" radio service with a focus on music discovery makes the site a particularly interesting case study with regards to classical music. Now that I have provided a brief overview of the site, I would like to look at the ways in which such a service could be significant to classical music and its future.

### **The Classical Music Genome Project**

For the first two years of Pandora.com's operation, an attempt to create a station using the name "Beethoven" would produce the message, "Did you mean Camper Van Beethoven?"<sup>18</sup> Recordings of music composed by Ludwig van Beethoven were not part of the Music Genome Project's database. This changed on November 15, 2007 when the website unleashed classical music as part of the Music Genome Project, thanks to the efforts of seven music analysts who had been focusing exclusively on classical music for some time, analyzing recordings of works from the Middle Ages to the contemporary period. When this collection of data went online in November it contained around 20,000 individual works from over 500 composers. Since this initial offering Pandora.com has continued expanding

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<sup>18</sup> Camper Van Beethoven is an alternative rock group from California. They were most active in the 1980s.

its classical repertoire, especially by filling out its collection of music from the Renaissance and the Middle Ages.

### **Turning Music into Data**

The way in which Pandora collects, processes, and organizes the data on which the service depends provides some explanation as to why it took the site two years to begin offering classical music. It also provides a good starting point for examining Pandora's significance to classical music. First of all, to make classical music part of the Music Genome Project, Pandora had to have a sufficiently large collection of classical music recordings that could be analyzed and added to the database. Utilizing a major music encyclopedia, the company acquired recordings of works of the composers listed therein.<sup>19</sup> They then began compiling a list of composers not included and acquiring recordings of their works. As I alluded to above, the initial focus was on music from the Baroque period through the Modern era. However, adding to the collection remains an ongoing process for Pandora and they are continually obtaining more recordings of Medieval, Renaissance, and contemporary music.

After the recordings are collected, they must then be analyzed and, in effect, turned into data. Just as with popular music each piece is rated according to hundreds of musical attributes or "genes."<sup>20</sup> For the most part the analysis process is more time consuming with classical music than with popular music. While an analyst at Pandora.com may spend 20 to

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<sup>19</sup> This information comes from email correspondence with Pandora's music curator Michael Zapruder. He did not offer the title of the encyclopedia used.

<sup>20</sup> Determining the "genes" that would be used to analyze classical music at Pandora was largely the responsibility of musicologist Nolan Gasser. As I said, those who manage the site do not offer specific information about these genes, but it seems that the number of attributes considered in any analysis differs according to the repertoire being analyzed. From what I can ascertain, most classical music is analyzed by the site according to a larger number of genes than most popular music.

30 minutes total on a pop song, a single movement of a symphony may take that long just to listen to. The Pandora analysis process attempts to account for all of the musical factors that contribute to the overall aural impression of a recorded piece - instrumentation, stylistic features, formal structures, and timbral details. When this analysis process is complete, a piece will have its own unique profile. Each profile is stored as data in the Music Genome Project database.

Pandora's process of gathering a large number of classical music recordings, analyzing all of them using the same system (i.e. rating their various musical genes), and storing the results as data raises interesting questions about classical music in contemporary society and, especially, the conception and purpose of musical analysis. In the past, analysis of classical music has been used as a tool to accomplish a number of objectives including: developing explanatory theories of how music works, accounting for the superior value of some pieces over others, explicating the meaning (musical and/or extra-musical) of musical works, creating stylistic comparisons, and pedagogical instruction (especially for composers). For most of this analysis, the written score has been the object of inquiry, and the results have been presented in the form of prose (often accompanied by some or all of the following: annotated score excerpts, diagrams, models, graphs, and recorded musical examples).<sup>21</sup>

At Pandora.com, classical music analysis is a much different endeavor. Analysts deal only with sounding objects (recordings), and they focus much more on description and classification than on interpretation. The process is less like what most musicologists and music theorists studying Western classical music today consider "analysis," and more like the practices of early ethnomusicologists (or "comparative musicologists") who attempted to

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<sup>21</sup> See Ian D. Bent and Anthony Pople, "Analysis" in *Grove Music Online*. *Oxford Music Online*, <http://www.oxfordmusiconline.com.libproxy.lib.unc.edu/subscriber/article/grove/music/41862> for an exploration of the various uses and conceptions of musical analysis.

establish grand taxonomies of the stylistic characteristics of the world's musics. Using recordings to determine and classify significant musical attributes was an important part of the work of many scholars during the first half of the 20<sup>th</sup> century. From Erich von Hornbostel's activities at the Berliner Phonogramm-Archiv in the early decades of the 1900s to Alan Lomax's development of Cantometrics in the 1950s and 60s, much of this kind of work was done in the name of objectivity and scientific rigor.<sup>22</sup> The musical information contained on recordings was, essentially, turned into "data" that could then be used to support various hypotheses. On the surface, Pandora's Music Genome Project appears strikingly similar – a rational "scientific" approach to the analysis of musical sound that produces data useful for classification and comparison. While the surface similarities between these approaches to musical analysis are interesting, it is important to note their differences. Pandora analysts are working with commercial recordings of classical music while early ethnomusicologists were dealing mostly with field recordings of non-Western and folk music. Moreover, once the music has been analyzed and the results recorded as data, the use of this data is vastly different. Scholars of non-Western and folk music in the first half of the 20<sup>th</sup> century were often using data from musical analysis to try to account for the stages of development of human culture.<sup>23</sup> Pandora.com, on the other hand, uses its

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<sup>22</sup> See, for example, Otto Abraham and Erich von Hornbostel, "Vorschläge für die Transkription exotischer Melodien," *Sammelbände der Internationalen Musikgesellschaft* (1909-1910) 1-25, translate by George and Eve List as "Suggested Methods for the Transcription of Exotic Music," *Ethnomusicology* Vol. 38, No. 3 (Fall 1994) 425-456; and Alan Lomax, *Folk song style and culture. With contributions by the cantometrics staff and with the editorial assistance of Edwin E. Erickson*. (Washington: American Association for the Advancement of Science, 1968). In his article for the *New Grove* Darius L. Thieme defines Cantometrics as "a system of analysis for studying various facets of folksong performance, developed by Alan Lomax and Victor Grauer. Musical factors relating to song style are submitted to statistical analysis and correlated with social and cultural data, with a view to delineating the role of the folksong in its cultural setting. ...supporters see the system as an attempt to establish universally applicable guidelines for the study of folksong." Darius L. Thieme, "Cantometrics," in *Grove Music Online. Oxford Music Online* (accessed 17 July 2008) <http://www.oxfordmusiconline.com.libproxy.lib.unc.edu/subscriber/article/grove/music/04788>.



analytical data to create personalized radio stations for its users, and to facilitate their discovery of music.

Under the scrutiny of Pandora's analysts, classical music is treated in a way that is, perhaps, without historical precedent. These analysts are expected simply to account for what they hear on a recording. It is not their place to argue for the relative musical value of one work over another. They merely rank the attributes of any given piece in order to create a "profile" – a unique identity for the piece within Pandora's database. Every recording is subject to the same musical "gene" ranking process, whether its music was composed by J.S. Bach or J.C. Bach; Mozart or Pleyel; Beethoven or Spohr. With Pandora, the analyst's responsibility is only to feed the mechanism that allows users to find classical music they might like. It remains up to the listener, not the analyst, to determine whether a particular piece of music is "sublime" or "transcendental" or "trite."

Pandora's unique approach to collecting classical music and turning it into data through analysis raises some interesting questions about the nature of digital music. The company's own music curator Michael Zapruder asks in one of his regular postings on the site's blog, "is the easy availability of music as digital files, and the fundamental similarity those files have with other digital files like emails, taxes, word documents, and such, an aesthetic liability for the music? (...) Or are we simply getting past the surface so that we can have a real relationship with the music, free of myths and posturing?"<sup>24</sup> Zapruder's question is an important one if we wish to assess the potential significance of a site like Pandora.com for the future of classical music. People have held starkly contrasting views about the effects

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<sup>23</sup> See Ruth Stone, *Theory for Ethnomusicology* (New Jersey: Pearson Prentice Hall, 2008), for an outline of the various motivations behind ethnomusicological inquiry during different stages of its development.

<sup>24</sup> Michael Zapruder, *Play Listen Repeat vol. 10* (March 2007)  
<http://blog.pandora.com/pandora/archives/2007/03/index.html>

of using technology to make music more easily accessible since at least the advent of recording. For example, when long playing vinyl discs (LPs) made it possible to hear recordings of longer classical works (i.e. symphonies, concertos, operas, etc.) in their entirety, many hailed this development as a great democratizing force for classical music. The “masses” would be able to hear and appreciate the “masterworks” without having to go to the symphony. On the other hand, another faction believed that this reified form of classical music presented something more akin to Zapruder’s “aesthetic liability.” Such recordings, in their estimation, provided a cheap substitute for “actual” classical music and may lead to the decline of symphony orchestras and employment opportunities for professional musicians.<sup>25</sup> In the end, the availability of classical recordings on LPs did not change music as drastically as either the democratizing or the devaluing camps predicted. Similarly, Pandora’s approach to classical music, in itself, is not likely to vastly alter the course of classical music history. However, it is an approach unlike any in the past and one that is receiving attention from the general public. As such, it deserves careful consideration. Like earlier innovations, such as the LP, Pandora’s impact on classical music may not be revolutionary, but it will be irrefutable.

By analyzing every piece of classical music in the same manner and turning the results into data, Pandora does not create an “aesthetic liability” for classical music but merely an organizational scheme. Its system of gathering and processing data serves primarily to allow its users easy access to classical music and the ability to experiment and explore. The service caters to three basic kinds of listeners (and these categories certainly overlap): those who enjoy classical music as “background music,” those who are classical

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<sup>25</sup> See Mark Katz, *Capturing Sound* (Berkeley, California: University of California Press, 2004) 48-71, for a discussion of similar debates surrounding the early years of the phonograph in America.

music fans and want to listen to music they know, and those who are curious about classical music. It is with this third group of listeners that the service's potential impact is greatest. That there are a growing number of people who routinely turn to tools and services on the internet to help satisfy their cultural curiosities, particularly their musical curiosities, has been widely noted.<sup>26</sup> Pandora's brand of musical analysis works to fulfill this demand for new knowledge about music. The service's system may not provide the same depth of information as some scholarly approaches to musical analysis, but its goals are different. Analysis functions mainly in the service of facilitating the easy discovery of music for listeners. Once Pandora's analysts have rated a classical recording according to its sound, it becomes available to curious listeners who may be searching for it. Even if Pandora's marriage of musical analysis and database technology does not have monumental effects on classical music at large, it is noteworthy because of the way it changes the relationship between the music and the curious listener.

### **The Analysts**

If Pandora's impact on the life of classical music in contemporary society comes partially from the way they collect classical music and process it, turning it in to useable data, then we must also consider *who* is responsible for this processing. Who are the analysts at Pandora? What experiences, skills, and biases come to bear on their analyses? Music theorists such as Nicholas Cook have argued that music analysis sometimes exposes as much

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<sup>26</sup> See, for example, Harrison-Rexrode, J. , Hughes, M. and Ryan, J., "The American Omnivore: How American Musical Taste Patterns Differ From Those in Van Eijck's (2001) Dutch Study." *Paper presented at the annual meeting of the American Sociological Association, New York, New York City*. Retrieved 5 June 2008 from [http://www.allacademic.com/meta/p183664\\_index.html](http://www.allacademic.com/meta/p183664_index.html); Susan Butler, "Survey: Internet Expanding Musical Tastes, Boosting Industry," *BillboardBiz* (3 January 2007) <http://www.allbusiness.com/retail-trade/miscellaneous-retail-retail-stores-not/4392550-1.html>; and Larry Rodgers, "Sites Help Boomers Get Hip to a New Bag of Tunes," *The Seattle Times* (8 July 2008) E1.

about the analyst as the music.<sup>27</sup> If this is the case, some knowledge about who Pandora employs to build its classical music Genome Project is necessary in order to understand Pandora's significance.

Every piece of music that enters the Music Genome Project must be examined by one of the music analysts employed by Pandora. For classical music, there are seven primary participants in this process. One of them is Nolan Gasser, the composer and musicologist who was one of the first people to work with Tim Westergren on the Music Genome Project, and the other 6 are a group of musicians and composers who are responsible for the actual analyses of the music.<sup>28</sup> These four men and two women are "trained" musicians, each with at least a four-year degree in music. They are all active performers in addition to working as analysts for Pandora. Importantly, all six of them regularly perform both classical and popular music.

Matt Cannon, for example, is a percussionist with a graduate degree from the San Francisco Conservatory.<sup>29</sup> He has performed with the San Francisco Composers Chamber Orchestra and played on recordings of music by Darius Milhaud and others. He is also a member of the "neo-cabaret" group Cotton Candy and has recorded with the Bay Area dance band Beatropolis.

Another analyst, Melody Parker, is a vocalist and accordionist whose own music portrays influences from world music, jazz, folk, cabaret, and classical. On her Myspace.com page, in addition to offering samples of some of her recordings, she provides

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<sup>27</sup> See, for example, Nicholas Cook, "Analysing Performance and Performing Analysis" in *Rethinking Music* (Oxford; New York: Oxford University Press, 1999) 239-261.

<sup>28</sup> Nolan Gasser holds a master's degree in composition from NYU and a PhD in musicology from Stanford. The other six analysts are: Michelle Alexander, Matthew Cannon, Russell Johnson, Melody Parker, David Shamrock, and Cole Thomason-Redus.

<sup>29</sup> Matt Cannon's blog can be found at <http://www.mlcmusic.com>.

links to a number of classical music stations she created on Pandora, and writes about getting the classical Music Genome Project started:

Our library of classical music is already enormous, encompassing far more than the "Mostly Mozart" repertoire to which most classical music radio is limited. We have plenty of modern era music--yaaaaay!!!! Debussy, Shostakovich, Ravel, Stravinsky...<sup>30</sup>

Although I will not take the time to delve into the biographies of each Pandora analyst, they all have experiences with both classical and popular music, and these experiences doubtless have an effect on what they do for Pandora. A clear manifestation of this shows up in the series of podcasts produced by the site (titled "Pandora Presents... The Musicology Show"). Every other week, Pandora analyst Kevin Seal talks with a guest (usually another Pandora analyst) about a particular musical topic (composition, instrumental technique, recording practices, vocal styles, etc.). These podcasts are intended to offer some basic technical and theoretical knowledge about music to anyone who may be interested. Each show is peppered with musical examples to illustrate the various points made. Matt Cannon, Melody Parker, and two of the other classical music analysts have participated on episodes of this podcast series in which they use both classical and popular music examples to demonstrate certain concepts. For example, analyst and pianist Michelle Parker plays passages from Beethoven's Piano Sonata No. 15, Op. 28 (the "Pastoral Sonata") as well as "Who are You" by the Who in order to show different uses of pedal point.<sup>31</sup> In another episode Matt Cannon uses

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<sup>30</sup> Melody Parker, "Classical Music on Pandora Radio," Nov. 6, 2007, <http://blog.myspace.com/index.cfm?fuseaction=blog.view&friendID=218959174&blogID=326208464>.

<sup>31</sup> "Pedal Point," *Pandora Presents... The Musicology Show* (7 March 2007) [http://blog.pandora.com/archives/podcast/2007/03/pedal\\_point.html](http://blog.pandora.com/archives/podcast/2007/03/pedal_point.html).

popular and classical music examples played on the marimba to illustrate the way dynamics function in music.<sup>32</sup>

These podcasts give us a window into the ways in which Pandora analysts approach classical music. It is an approach that highlights the similarities between popular and classical music more so than the differences, and is, therefore, representative of the trend toward “omnivorism” discussed in the introduction. Perhaps that is to be expected from a group of analysts who each have a foot in both performance traditions. The important question to ask for the purposes of this paper becomes, “to what extent do these analysts’ experiences affect the way Pandora listeners encounter classical music?”

Because personal information about Pandora’s analysts is not readily available through its website, the average listener knows little about the musical backgrounds of these people. Therefore, the influence of the experiences and personalities of these analysts on Pandora listeners is not an explicit one. On the other hand, the musical histories and practices of these analysts certainly affect their analyses to some extent and, by extension, have some kind of impact on the playlists generated by Pandora. A more direct influence, however, may come merely from Pandora’s assertion that its analysts are “highly trained.” This notion is repeated frequently in interviews by founder Tim Westergren, and stated explicitly on the FAQ page of Pandora.com:

[Pandora is] powered by the most comprehensive analysis of music ever undertaken, the Music Genome Project: a crazy project started back in early 2000 to capture the complex musical DNA of songs using a large team of highly-trained musicians.<sup>33</sup>

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<sup>32</sup> “Quiet and Loud” *Pandora Presents... The Musicology Show* (8 August 2007) [http://blog.pandora.com/archives/podcast/2007/08/quiet\\_loud.html#more](http://blog.pandora.com/archives/podcast/2007/08/quiet_loud.html#more)

<sup>33</sup> “What is Pandora?” <http://blog.pandora.com/faq/#13>.

What exactly does it mean to be “highly-trained?” And what is the significance of Pandora listeners knowing that any music they hear on the site has passed through the analytical scrutiny of musicians with such training?

As far as Pandora is concerned, the descriptor “highly-trained” refers to both academic training (all of the analysts have music degrees<sup>34</sup>) and training on Pandora’s genome (learning how to analyze music within the parameters used by the Music Genome Project). Undoubtedly, having been through these two kinds of training ensures that Pandora analysts have a firm grasp of the elements of music and well developed listening skills. But for many listeners the idea that Pandora’s analysts are “highly-trained” may carry additional weight beyond simply confirming that these people are qualified to do their job. Note the terminology in the quote above from Pandora’s FAQ. Words like “comprehensive,” “crazy,” and “complex” stress the technical and scientific aspects of the work of Pandora’s analysts. In fact, they seem to imply that this work is incomprehensible to the layman, and only a select few “highly-trained” individuals have the capability to carry out work of such objective rigor. This emphasis on the credentials of Pandora analysts is not fundamentally positive or negative. In one sense it is an effective marketing strategy for the company. New listeners may be attracted to the service if they believe it employs experts. And these new listeners may in turn be enticed to discover classical music they like through Pandora. On the other hand, Pandora’s insistence on the extraordinary abilities of its analysts and the exactitude of their work may give listeners a false sense of their authority. Listeners could come to believe that Pandora playlists are “right;” that a station started using the name of a

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<sup>34</sup> Although those I talked to at Pandora did not discuss analysts’ education in detail, to the best of my knowledge only Nolan Gasser holds a PhD in Musicology. It appears that among the other analysts, all have four-year undergraduate degrees and some hold Masters in performance or composition.

particular composer gives a true sense of the nature and scope of that composer's music. This is not always the case. For example, Pandora listener Richard Friedman noted in December of 2007 that starting a station with the name of nineteenth-century German composer Anton Bruckner – best known for his symphonies – led to a stream of mainly religious choral music.<sup>35</sup> This was probably the result of a dearth of Bruckner's music in Pandora's database (possibly only his choral music had been analyzed at the time of Friedman's comment), but for a listener who was generally unfamiliar with Bruckner's output this could be seriously misleading. Furthermore, there is the possibility that, rather than inspiring confidence in the service among its users, Pandora's insistence on the scientific nature of its analysis process and the uncommon skills of its analysts may perpetuate a conception that has kept people from listening to classical music for a long time. Namely, that it is too complex to be accessible to an average listener.

In order to understand Pandora's significance for the future of classical music, an understanding of the significance of who is employed by the company to process its classical music database is necessary. These are academically trained musicians who are active performers and have experience in the classical and popular music worlds. These people may be instrumental in helping listeners find commonalities between popular and classical music which could lead to new ways of listening to and new grounds for the appreciating classical music. Too much stress on the scientific nature of these analysts' work, however, could distance some listeners or give them a distorted sense of the nature of the classical music they hear through Pandora.

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<sup>35</sup> Richard Friedman, "Data Mining, Music Streaming, and Pandora" *rchrd@sun* (6 December 2007) [http://blogs.sun.com/rchrd/entry/data\\_mining\\_music\\_streaming\\_and](http://blogs.sun.com/rchrd/entry/data_mining_music_streaming_and).

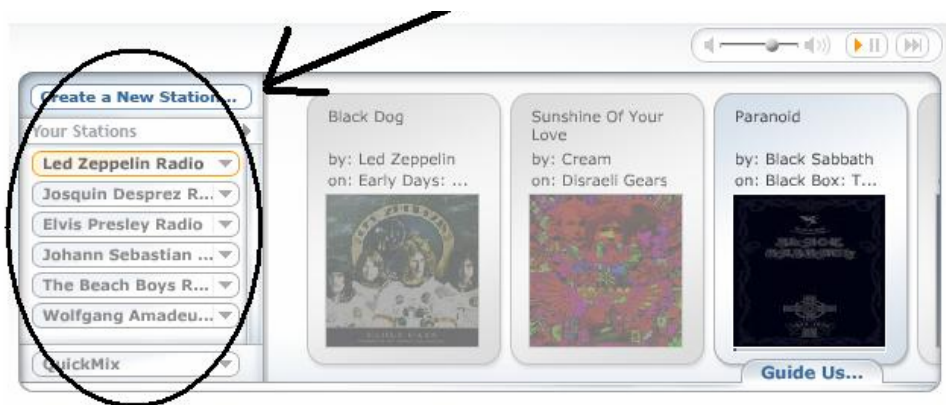


## Presenting Music to the Listener

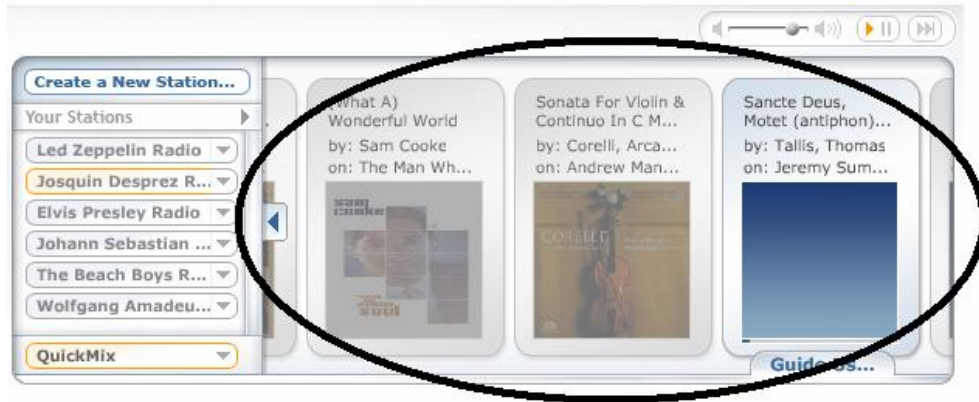
While explorations of the “who” and the “how” of Pandora’s analytical system are essential if we want to understand the site’s significance, it is a third aspect of the service, the way it presents data (music) to the listener, that is the most important for this paper. The greatest potential to affect listener’s perceptions of classical music comes from their actual experience of using Pandora. A deeper understanding of the relationship between Pandora and its listeners is contingent upon an investigation into the following three areas: the content of the playlists generated by Pandora, the design of Pandora’s internet radio interface, and the extra-musical content that the service offers to listeners.

## PLAYLISTS

One truly significant feature of Pandora’s service is that classical and popular music exist, for the listener, in the same virtual space, whether side by side as stations or as consecutive selections on a single station (see Figure 1.3 and Figure 1.4).



**Figure 1.4:** Popular and Classical Stations



**Figure 1.5:** Popular and Classical on the Same Station

I have already discussed the ways in which Pandora's analysts exist in both musical worlds (classical and popular) simultaneously. The service provides an opportunity for its listeners to do the same. And it appears that they do. The vast majority of Pandora listeners who have created classical music stations have also created popular music stations. For example, in examining the profiles of 50 users who had created a "Josquin des Prez" station (and at least 3 other stations), only two people were listening exclusively to classical music. Similarly, there were only 2 "exclusively classical" listeners out of a group of 50 who had created an "Arnold Schoenberg" station, and only 3 out of a group of 50 who had created a "Ludwig van Beethoven" station. It is clear that most Pandora.com listeners who inhabit the world of classical music also inhabit the world of popular music.

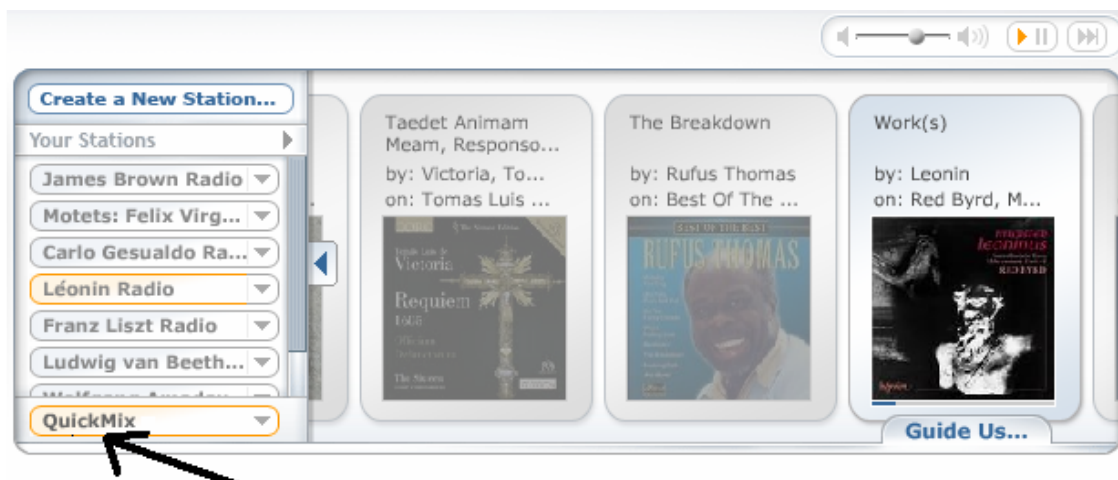
What is more, there is nothing keeping Pandora users from having the service play both classical and popular music in the course of one listening session. This is possible in a couple of different ways. Users can utilize a feature of the Pandora service called "Quick Mix" in which songs from a number of different stations will be played. For instance, if a listener has created a "Leonin" station, a "James Brown" station, and a "Carlo Gesualdo"

station the service can be asked to play music from all three using the “Quick Mix” feature.



**Figure 1.6:** Pandora QuickMix feature

Some may find such a combination outlandish, nevertheless it is a possibility easily accessible to Pandora’s listeners. When I tried this combination, Pandora played music from the Spanish Renaissance composer Tomás Luis de Victoria (Gesualdo radio), Memphis soul singer Rufus Thomas (James Brown radio), and medieval Notre Dame legend Léonin (Léonin radio).



**Figure 1.7:** QuickMix Playlist

Besides using the “Quick Mix” feature, listeners can also create stations using both classical and popular “seeds.” A single station could have potentially produced the playlist above if its definition included Léonin, Gesualdo, and James Brown. The prospect of hearing such a combination of classical and popular music on a single radio station creates possibilities not

available to music listeners of the past. Such listening experiences may have the power to alter people's perceptions of classical music in that they eliminate the music's long maintained separation from popular music and create juxtapositions that allow classical (and popular) music to be heard in new ways.

While creating unlikely juxtapositions certainly provides an opportunity to hear music in new ways, some issues arise when considering how Pandora playlists are constructed. Most significant, perhaps, is the fact that Pandora cannot play multi-movement works in their entirety. This has to do with licensing restrictions and royalty payments. Internet radio providers must pay royalties on a "per-song" basis. In order to do this, each track on a recording must be considered a different "song." Additionally, licensing restrictions limit the number of "songs" that can be played from the same recording within a 3 hour period. The number of "songs" played on a station from any one artist is similarly restricted. Therefore, as it stands now, it is impossible for a Pandora listener to hear all 4 movements of Beethoven's Fifth Symphony in order. Some users have found this to be a major problem. Consider, for example, the comments of Richard Friedman:

So here comes the 3rd movement of Beethoven's 5th Symphony slamming into a Rossini overture just as you were expecting the dramatic starting chords of the 4th movement! Its [*sic*] enough to send you screaming from the room!<sup>36</sup>

The unity of multi-movement works is something considered by some to be an important part of the experience of listening to classical music (at least for certain repertoires), but it is something that cannot be preserved on Pandora's playlists. This leads to a sense of fragmentation when listening to classical music on Pandora. It should be noted, however, that the unity of multi-movement works was not always treated with such reverence. In the

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<sup>36</sup> Richard Friedman, "Data Mining, Music Streaming, and Pandora," *rchr@sun* Dec. 6, 2007, [http://blogs.sun.com/rchr/entry/data\\_mining\\_music\\_streaming\\_and](http://blogs.sun.com/rchr/entry/data_mining_music_streaming_and).

eighteenth century and much of the nineteenth century various works might be inserted between the movements of a symphony during a concert. Even works with a clear narrative, such as operas, would often include interruptions and performances of pieces without relevance to the structure of the plot. Because of this, it is difficult to argue that Pandora's playlists represent a somehow "inauthentic" approach to classical music. Even if fragmentation is bothersome to some listeners who value multi-movement coherence, it is but a 21<sup>st</sup> century variation on the listening experiences of many people in earlier times.

Another question to ask about Pandora playlists is: what *specific* pieces are played on a Pandora station? If a user starts a station using "Ludwig van Beethoven" as the seed, what will be played? Will it be symphonic music? Chamber music? Opera? Solo piano music? Beethoven wrote music in all of these genres and more, and recordings of most of these pieces exist in Pandora's database. The answer is that any of these are possible. Starting three different "Ludwig van Beethoven" stations on three different days, the service began by playing a different piece on each occasion. The first time I heard Mozart's Sonata for Violin and Piano No. 20; the second time I heard a Piano Sonata by Muzio Clementi, Op. 20, No. 2; and the third time I heard the Finale to Beethoven's Third Symphony. The listener looking for a classical music stations with narrowly focused playlists will have a difficult time getting such results from Pandora. The mechanism by which users create stations is partially responsible for this.

Listeners are prompted to "type in the name of [their] favorite artist, song or composer," in order to create a station, but if Glenn Gould is typed in, the service will ask "did you mean the artist Glen Glenn?" Similarly, typing in "Erlkönig" will not start a station based on recordings of the Schubert composition. In order to hear classical music on

Pandora.com, one must start with the name of a composer.<sup>37</sup> The service is structured in this manner for fairly obvious reasons. Typing in “Allegro” as a “song” seed would produce far too many results to even be useful. Also, many artists who make classical music recordings play pieces in many different styles from distant historical periods – not to mention that a number of so called “classical artists” also appear on popular music recordings. For these reasons, hearing classical music on Pandora.com is a “composer-centric” process. While this may perpetuate what some call a “great man” approach, it can also make “tuning” stations difficult. If a listener wants a station to play music in the vein of Beethoven’s late works, for instance, it will require quite a bit of “thumbs up” and “thumbs down” feedback in order for the station to produce that kind of precision. It may require several hours of listening.<sup>38</sup> I tried to create a station that played only string quartets similar to Beethoven’s late compositions. Even though I have given numerous “thumbs downs” every time the service plays a piece composed before 1820, Pandora continues to play quartets by Haydn and Mozart with some frequency. The analytical criteria used by the Music Genome Project to create playlists, it seems, are not as specific as some classical music listeners would like them to be. Coupled with the fragmentary nature of Pandora’s classical playlists, this can lead to a frustrating experience for certain listeners.

Another issue is that of available repertoire. Though the service contains a much broader selection of music than one could expect to hear on any FM classical station, there are still gaps. For example, Peri, Caccini, and Fontanelli all produced no results when I

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<sup>37</sup> It is possible to create a station based on a single composition, but you must be somewhat familiar with the service in order to do so. It requires you to open Pandora.com’s “Backstage” feature (part of the service that provides biographical-type information about artists and composers) and follow a series of links which allow you to select an individual track from a specific recording as a station seed.

<sup>38</sup> Of course, all feedback you give is saved permanently as part of a station’s definition, so this “several hours of listening” can take place over days or even months.

attempted to use them as station seeds. The early Baroque selections offered by Pandora.com could clearly be expanded. Most musicologists or serious classical music aficionados would have no problem coming up with a list of composers (from any historical period) not represented in the website's database.<sup>39</sup> With that said, the site is adding more classical music every day and attempting to fill in their gaps.

Finally, although it may not fit explicitly under the sub-heading "Playlists," the related topic of sound quality needs to be mentioned. Pandora streams digital music in the MP3 format. When music is encoded as an MP3, it is compressed, meaning that some data is removed in order to create a more manageable file size.<sup>40</sup> MP3s can be encoded at different bit rates; the lower the bit rate, the more data that has been removed from the original. Although there are many variables (playback device, listening environment, attentiveness of the listener, etc.) and frequent debate over how much detail the human ear can actually perceive, the sound quality of music that has been compressed into an MP3 is related to the bit rate at which it was encoded (normally measured in kilobits per second – kbit/s). Pandora streams MP3s that have been encoded at 128 kbit/s, a common bit rate for digital music, but one that lowers music's sound quality, when compared with a CD, to a degree perceptible by some.<sup>41</sup> Compressed audio formats may have the greatest affect on the sound of certain types

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<sup>39</sup> It may be worth pointing out that the site's ability to add any composer's works to its database is dependent upon the existence and availability of commercial recordings of those works.

<sup>40</sup> For an explanation of how MP3 encoding works see Paul Sellars, "Behind the Mask" *Sound on Sound* (May 2000) <http://www.soundonsound.com/sos/may00/articles/mp3.htm>.

<sup>41</sup> For comparison, digital music obtained through Apple's iTunes is also usually encoded at 128 kbit/s (though they do offer some music at higher bit rates). It should be noted, though, that iTunes uses a format known as AAC, which is ostensibly less "lossy" than the MP3 and makes direct comparison between bit rates difficult. Music purchased through Amazon.com's MP3 service is encoded, on average, at 256 kbit/s. Some specialty digital music retailers such as eClassical.com offer MP3s at bit rates as high as 320 kbit/s. The extent to which people can perceive differences in sound quality between MP3s encoded at different bit rates is widely contested. Some blind listening tests and interesting discussion about the topic can be found here, <http://www.good-music-guide.com/community/index.php?topic=1745.0>; and here, <http://www.eclassical.com/eclassic/eclassical?&page=blind%5ftest>.

of classical music. Symphonic music, for example, encompasses a huge range of sonic nuance and timbral detail, some of which must be removed when the music is encoded as an MP3 at 128 kbit/s. Arguably, Pandora presents an impoverished version of symphonic sound to its listeners. For listeners unfamiliar with classical music, this sound quality may leave them with an underestimation of its potential aural force.

## USER INTERFACE

In order to use Pandora's internet radio service, listeners must, of course, interact with the service. Upon opening the webpage *www.pandora.com*, one is faced with Pandora's user interface. This interface is the means through which input is offered by the listener and through which output is given by the service (based, to some degree, on the listener's input). Interacting with this interface is a fundamental part of the experience of using Pandora. Because of this, an exploration of Pandora's potential to affect the way people listen to and perceive classical music must take into account the design of the service's user interface.

"Simplicity" seems to be the mantra of those responsible for the creation of Pandora's user interface.<sup>42</sup> The site's founder Tim Westergren had this to say when asked about the service's interface in a 2007 interview:

The challenge when we launched this was: how do we create something very simple but that explains how it works, too? It has to convey the idea of a genome... But it can't do that in a way that requires you to read three paragraphs of text, or six clicks to a glossary or something... That's why we start with just one search box, why there's no software to download. People have most definitely responded positively to simplicity. Most of what's built by other Silicon Valley companies is built for themselves —

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<sup>42</sup> Dan Lythcott-Haims is the designer responsible for the Pandora interface. Before joining Pandora, he designed exhibits for children's museums. Tim Westergren speaks about this in an interview with students from Stanford University's Business and Design schools. It can be found at, <http://innovate.blogspot.com/2007/04/tim-westergren-pandora.html>. Lythcott-Haims profile can be viewed at <http://www.pandora.com/people/danlh1>.



they're all tech geeks or music geeks, so they build things that they would want. And that tends to be more complicated — that's the temptation.<sup>43</sup>

The simplicity of design is, in a word, encouraging. Exploring new musical territory is easy and risk free. If a listener is unfamiliar with works by Stravinsky, for example, but is curious about his music, it requires only that this listener know the name “Stravinsky,” and the composer’s music (or music of a similar nature) will be playing in a matter of seconds. This simplicity gives listeners a sense of accessibility, even when it comes to unfamiliar music. The notion that classical music is too complicated or too esoteric, which has long served as a barrier keeping some listeners from exploring its sounds, is absent from Pandora’s presentation of the music.

On the other hand, this same simplicity of design creates certain problems when it comes to classical music. Pandora’s interface utilizes a bipartite categorization system, recognizing “song” or “artist.” Of course, these categories are not sufficient when dealing with recordings of most classical works. Many times at least 4 categories are needed: composer, artist, work, and movement – and there may be separate titles for the latter two categories. Because Pandora.com originally offered only popular music and because it strives to maintain the simplicity the “song and artist” model is central to the design of its interface. This can be off putting and inconvenient for some classical music listeners.

There are other aspects of Pandora’s user interface design that have the potential to affect people’s perceptions of the music they hear on the site. The conspicuous placement of advertisements is especially noteworthy (see **Figure 1.4** for an example of product placement on the Pandora interface). The simultaneous presence of the sound of a Wagner overture and

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<sup>43</sup> Tim Westergren from an interview with Peter Kirn. See “Pandora’s Founder on Decoding Taste and Promoting Indie Music” *Create Digital Music* (16 March 2007) <http://createdigitalmusic.com/2007/03/16/pandoras-founder-on-decoding-taste-and-promoting-indie-music>.

a flashing life-sized picture of a Wendy's cheeseburger makes for a sensory experience quite unlike the quasi-religious contemplation often associated classical music listening. Many music historians have noted how classical music acquired the status of a high art gradually throughout the nineteenth century. Certainly, by the latter part of the 1800s, classical music (particularly instrumental or "absolute" music) was generally accepted as something that should be revered. Along with this elevated status came a tendency to hide the more blatantly commercial aspects of the music. As a "high" art, classical music was something that existed "above" the influence of mere economic concerns, it was believed. The manifestations of this can be seen today in the modern concert hall. While companies that sponsor popular music performances will often prominently display advertisements during a performance, such advertisements do not enter the line of sight of attendees at a classical performance (what advertisements there are will probably be buried in the program). Even the brand names on speakers and other electronic audio equipment, which are often clearly visible at popular music concerts, will be hidden or removed at classical performance venues. Similarly, a large percentage of classical music stations on terrestrial FM radio are, at least in part, publicly funded and feature less conspicuous advertising than most popular music stations.

Pandora's service is funded by advertisers. In order to access music through the Pandora interface users must come into contact with these advertiser's displays.<sup>44</sup> Whatever music a user may be listening to, be it popular or classical, the commercial nature of Pandora's service will be apparent. The reality that classical music relies on the same system

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<sup>44</sup> A small percentage of users do opt to receive Pandora's subscription service. For a monthly payment, these listeners gain access to a version of the Pandora interface that does not include advertisements.

of economic exchange as any other form of music is not hidden by Pandora. Rather, the service's interface places that fact in plain view for all of its classical music listeners.

While many people could argue that putting music in such a commercialized context encourages distracted listening, there is another side to the design of Pandora's interface. Users are invited to interact with the service through various options accessible on the Pandora player. They can "bookmark" the names of pieces or composers (saving them on a list for easy viewing later), skip pieces that they do not want to hear at the current moment, and offer "thumbs up" or "thumbs down" feedback for pieces that they especially like or dislike. Furthermore, clicking on "thumbs up" or "thumbs down" is not merely a neutral action but influences what pieces the service will or will not play on a particular station in the future (it is analogous to "tuning" the station). User's interactions with the Pandora interface, therefore, serve in part to shape their listening experiences. This being the case, Pandora's listeners have an interest in engaged listening; actively considering not only what pieces they like and do not like, but also what it is specifically about those pieces that attracts or repels them. For example, a particular listener may decide that she likes certain selections where it sounds like a small group of strings plays an opening idea, presents some sort of contrasting material, and then returns to the opening idea. Even if she is not familiar with the concepts of a string quartet or sonata form, by giving a "thumbs up" every time such a piece is played and a "thumbs down" whenever something different is selected, she can create a station that plays primarily sonata form movements from string quartets. Pandora's interactive interface encourages a kind of critical listening in a way that most other available listening experiences do not.

Pandora's user interface works to put a new spin on classical music listening. The simple design and visible advertisements present classical music in a very "pop-like" context. This, on one hand, may make classical music more accessible to some, while, on the other hand, may make Pandora seem a less-than-adequate setting for the music. Also, while it could be claimed that presenting classical music in such a context makes for lackadaisical and distracted listening, there is much about Pandora's interactive interface that promotes engaged and critical listening on the part of its users. What is important here is not to determine which of these conflicting forces will "win out" in the end, but rather to acknowledge that any system of presentation is not merely a neutral mechanism. The various interfaces through which people engage with music have a pronounced affect on their listening experiences. Clearly, the design of Pandora's interface is altering the way some listeners experience classical music.

## THE EXTRA-MUSICAL

While Pandora's service is built on providing streaming audio to its users, it offers other features as well. Most importantly for classical music listeners, especially those relatively unfamiliar with the music, Pandora provides information about composers and recordings. This can be accessed by following links from the radio interface or by performing a separate search for a particular composer, recording, or piece of music. Pandora licenses this data from the All Music Guide, a generally reliable resource for accurate information.<sup>45</sup> Being able to read about composers' biographies immediately upon hearing their compositions provides listeners the opportunity for a contextualized listening

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<sup>45</sup> See [http://www.allmusic.com/cg/amg.dll?p=amg&sql=32:amg/info\\_pages/a\\_about.html](http://www.allmusic.com/cg/amg.dll?p=amg&sql=32:amg/info_pages/a_about.html) for more information about the All Music Guide.

experience. For the listener who is interested in classical music, but feels impeded by a lack of background knowledge, Pandora provides a listening environment where such knowledge is close at hand.

While the easy availability of extra-musical information surely figures into the ways in which Pandora alters peoples' perceptions of and experiences with classical music, it is not something unique to the service. Concert programs and liner notes on recordings have been contextualizing classical music for its listeners for years and, more recently, a number of web sites have come into existence that provide quick and easy classical music resources. However, one likely already has some knowledge about classical music if attending a concert or purchasing a recording, and looking up information on the internet requires at least knowing a composer or composition's name. A Pandora user can simply click on the name of a piece or composer that happens to appear on a playlist and a new window with information will pop up. This ease of access may be encouraging to some listeners looking to explore some of classical music's listening possibilities

Although Pandora does not sell music, users can access links to the online music retailers Amazon.com or iTunes from any selection played by the service.<sup>46</sup> If listeners hear music that they like, they can quickly purchase it and add it to their collection. This is significant because of a number of barriers (real and imagined), such as price, unavailability, confusing categorization schemes, and a perceived exclusivity that have kept potential customers from purchasing classical recordings in the past. Pandora's links work to bypass those barriers. They also provide the possibility of purchasing classical music through the exact same process that a listener would use to purchase popular music. Although it may

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<sup>46</sup> When a user reaches Amazon.com or iTunes through the links on Pandora and makes a purchase, a percentage of the profit goes to Pandora.com. According to founder Tim Westergren, around ten percent of Pandora's listeners use these links to purchase music.

appear that the experience of purchasing any type of music would be essentially the same, it is worth noting that most major retailers clearly demarcate classical recordings from all other types of recordings.<sup>47</sup> This tends to emphasize the differences (musical, cultural, and otherwise) between classical and popular music rather than the similarities, and may serve to make customers who are comfortable buying one type of music uneasy buying the other. For listeners who have made many popular music purchases throughout their lives, but are just coming to classical music, Pandora helps to place them in familiar territory.

Finally, Pandora's community features are part of its extra-musical offerings with some importance to classical music. Everyone who registers for the service has a listener "profile" that can be accessed by any other user at any time. On this profile is a list of every station created by that user, and these stations can be listened to (but not altered) by anyone. So, a Tom Waits fan that has just discovered Iannis Xenakis can search for other Pandora users who are listening to both. Messages can be sent between these users with similar tastes and they can share each other's stations. While traditional FM formats may give the impression that *nobody* listens to the music of Xenakis, Pandora, on the other hand, not only shows that others are in fact listening to this composer, but it also connects those listeners to each other.

Pandora provides an illustration of the possibilities available to a new class of internet classical music listeners. Beyond just hearing the sounds of the music, these listeners have easy access to information about composers, pieces, and recordings, as well as convenient pathways to purchasing recordings and connections to other listeners with similar tastes. The total effect of these extra-musical features is to create a kind of support system for listeners.

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<sup>47</sup> See Robert Fink, "Snapshot 2.3: Marketing Classical Music," in *Music cultures in the United States: an introduction*, ed. Ellen Koskoff, New York: Routledge, 2005; 50-54.

As critic Alex Ross points out in a 2007 essay published in the *New Yorker*, in the last 20 years classical music has all but disappeared from most mainstream media outlets in America including network television and magazines because its products are “deemed too elitist, effete, or esoteric.”<sup>48</sup> Sites such as Pandora present classical music to listeners in a way that works to counteract this notion.

### **Pandora and Classical Music: Now and in the Future**

Although the availability of classical music through Pandora’s internet radio service is a relatively new phenomenon, the web site provides an especially rich case study when considering the nature of certain aspects of classical music’s life in the internet age. We live in a time when classical music is more easily accessible than it has ever been and there is ample evidence that an interested and growing audience for the music exists on the internet. At the beginning of this chapter I pointed out that requests for classical music were the most frequently received user feedback for Pandora before it made the music available on its service. The site’s founder Tim Westergren also noted that user registration rose 10% in the two weeks after classical music went online.<sup>49</sup> Sites like Pandora that feed this new interest and demand also exert forces of change upon the music. In the end, Pandora’s interest in providing classical music for its listeners is not the same as a performer’s interest in the music, or a composer’s, or a musicologist’s for that matter, it is the interest of a business selling a service. Preservation, historicism, valorization - this is not the name of the game for Pandora, but rather supplying where there is a demand and seeking to make a profit. Thus,

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<sup>48</sup> Alex Ross, “The Well-Tempered Web” *The New Yorker* (22 October 2007) online at [http://www.newyorker.com/reporting/2007/10/22/071022fa\\_fact\\_ross?currentPage=all](http://www.newyorker.com/reporting/2007/10/22/071022fa_fact_ross?currentPage=all).

<sup>49</sup> Westergren quoted in Eric Zorn, “Change of Subject” *Chicago Tribune* (2 December 2007) Metro section, p. 2.

the music is made to fit the company's mold, and this means that change is taking place.

Classical music is being analyzed for purely practical reasons, it is being listened to in a pop music context, and it is being perceived in new ways by listeners discovering it for the first time. Whether this change is positive or negative is up to the observer, but it is undeniably occurring.

In the introduction to this paper I described three forces being exerted on classical music as a part of its presence on the internet: technology, eBusiness, and changing musical tastes. We see a convergence of these in Pandora's internet radio service. The service is, of course, reliant upon a number of new technologies. These become significant for classical music when we look at how they influence the way the music is presented to listeners.

Database technology facilitates Pandora's massive analysis undertaking, the Music Genome Project, which allows people to hear playlists made up of musically related selections. New technology also allows for an interactive listening experience, where users not only can tell the service what they like and do not like and have it respond accordingly, but can connect with other users as well. The MP3, which Pandora uses to broadcast music, is another technological innovation with a bearing on classical music. While this compressed format allows for great flexibility and convenience, it may be changing people's perceptions of music by making them used to lower quality sounds.

The new world of eBusiness blossoming on the internet is certainly exerting its force on classical music and doing so through Pandora. Importantly, Pandora, like many internet sites, offers a free service. Users make no financial investment, and revenue comes instead from advertisers. Pandora's interest, then, is not in serving a specific kind of clientele, but rather in simply attracting as many users as possible. This allows, and actually encourages,



them to offer an extremely broad range of content. For classical music listeners this means that through Pandora they have access to a giant library of recorded music containing compositions from the Middle Ages to today by famous composers and relative unknowns alike. It also means that in order to listen to this music they must be faced with a constant barrage of advertisements. Listening to classical music in such a commercialized environment is much different than most classical listening experiences of the past.<sup>50</sup>

The picture of musical taste that I painted in the introduction to this paper, as something that has little to do with notions of “highbrow” and “lowbrow,” undeniably has significance for the future of classical music. I have shown how Pandora creates a space where popular and classical music coexist. Those who analyze music for Pandora have experiences with both types of music, the vast majority of listeners who use the service to hear classical music also use it to hear popular music, and it provides an opportunity for listeners to hear classical and popular together on the same station. If a service like Pandora can give classical music a comfortable home along side popular music, then the music can easily become part of an omnivorous taste paradigm. As diverse tastes become the norm, people will continually be looking for new sounds and classical music will be included in this search. Pandora provides one model for how classical music and its would-be listeners can find each other. As Tim Westergren says:

I’ve always thought that you couldn’t really totally understand someone’s musical taste. The best that you could do is to get them in a neighborhood where they’re likely to find something they’ll like. I continue to believe that now having seen this — Pandora isn’t 100% accurate by any means. But I also do believe that you can understand someone’s musical tastes in

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<sup>50</sup> I will deal with the relationship between classical music and eBusiness in greater depth in the next chapter which explores eClassical.com, a web site that sells classical music downloads.

musicological terms. It's not the only ingredient, but it's a very substantial and powerful one.<sup>51</sup>

Clearly, the convergence of the forces of technology, business, and musical taste on Pandora are doing much to create a new way of finding and listening to classical music in the twenty first century. Having explored the details of the service and a number of different ways in which it affects peoples listening habits, experiences, and perceptions of classical music, the question remains: Just how significant is Pandora to the world of classical music? Though it is difficult to answer this question with exactitude it might be helpful to consider a few final thoughts.

Looking at the present, Pandora has over 9 million registered users in the United States and is growing every day. I do not know exactly how many of these listeners use the service for classical music. However, the great demand for the service to add classical in its early days, as well as the increased rate of growth after classical was made available provide some estimation as to how popular classical music is among Pandora listeners. Moreover, searching for Pandora user profiles containing stations created with composers such as Mozart and Beethoven returns results numbering in the hundreds of thousands. Judging by this evidence, it is safe to say that Pandora provides classical music to a substantial number of listeners. The majority of these, it appears from searches of user profiles, listen to both classical and popular music through the service. The fact that this many listeners regularly experience classical and popular music in such close proximity says something about the way contemporary listeners think about music. It is strong evidence that the barriers between popular and classical music that have been vehemently defended by some for many years are

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<sup>51</sup> Tim Westergren from an interview with Peter Kirn. See "Pandora's Founder on Decoding Taste and Promoting Indie Music" *Create Digital Music* (16 March 2007) <http://createdigitalmusic.com/2007/03/16/pandoras-founder-on-decoding-taste-and-promoting-indie-music>.

not so pronounced (or possibly non-existent, even) in the minds of a significant portion of the listening public.

Looking towards the future, it appears that by bringing classical music into the context of an advertising-driven popular new entertainment service Pandora may alter people's beliefs about classical music as something elite, esoteric, and prohibitively demanding, and may also affect people's perception of meaning and value in the music. To what extent, however, it is almost impossible to say. Beyond people's changing perception of music, though, Pandora paves the way for us to look into other parts of classical music's life-to-come. Most interestingly, it gives us a model of a new analytical paradigm, one in which music analysis serves a very practical function. It is easy to foresee a day when university music theory classes build their own music "genomes." With the right software, students could create a database based on their own analyses of works studied in the class. This could be a powerful educational tool for encouraging students to attend to the intricacies of musical works and to realize the connections between pieces. Such an educational use is but one example, the possible applications of Pandora's analytical model are diverse and many, with the potential to greatly affect the way people think about and listen to classical music.

Pandora's music analysis-based service shows us a business model of how classical music can be financially sustainable (and possibly lucrative) through the internet. However, it is perhaps not the best case study for examining the intricate relationship between eBusiness and classical music because the service does not focus exclusively on classical music. In the next chapter, I will examine another web site, eClassical.com, an internet business that deals in nothing but digital downloads of classical music recordings.

## eClassical.com

On December 31, 2003 the following words appeared on Norman Lebrecht's online column "The Lebrecht Weekly:"

I am about to make the rock-solid prediction that the year 2004 will be the last for the classical record industry.<sup>52</sup>

The highly opinionated and often polemical Lebrecht has written extensively on the subject of classical music recordings, including his recent publication *The Life and Death of Classical Music*.<sup>53</sup> The picture he paints is a grim one: album sales are in decline, the major labels' output is minimal, great performers and conductors no longer get contracts, formerly classical radio stations have all changed formats – according to Lebrecht, the quantity and quality of recorded classical music that was once a major part of musical culture is gone.

In 2008, no one can dispute the fact that major labels release much less classical music than they used to and that CD sales of classical music have decreased. Nevertheless, Lebrecht's notion of "death" is one not shared by many, as the classical recording industry has certainly survived past 2004. In fact, Nielsen SoundScan released statistics in early 2007 showing "classical" as the category with the greatest sales growth in the preceding year!<sup>54</sup>

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<sup>52</sup> Norman Lebrecht, "Look Who's Been Dumped," *The Lebrecht Weekly* Dec. 31, 2007, <http://www.scena.org/columns/lebrecht/031231-NL-recording.html>.

<sup>53</sup> Norman Lebrecht, *The Life and Death of Classical Music: Featuring the 100 best and 20 worst recordings ever made* (New York: Anchor Books, 2007).

<sup>54</sup> Nielsen SoundScan is an information service that collects musical recording sales data from mass merchant, retail, and online stores. This data is then licensed to companies such as Billboard, MTV, and VH1. The statistics noted here have been referred to in numerous articles and blogs. See Chris Anderson's blog for some further interpretation of the data as well as a link to the document containing the SoundScan numbers: "Year-End Music Stats" *The Long Tail* (4 January 2007) [http://www.longtail.com/the\\_long\\_tail/2007/01/yearend\\_music\\_s.html](http://www.longtail.com/the_long_tail/2007/01/yearend_music_s.html).

Indeed, even if major labels cannot sustain the output of former times, a number of smaller independent labels have become players in the classical music world; not to mention organizations such as the London Symphony Orchestra, the Chicago Symphony Orchestra, the San Francisco Symphony Orchestra, and others that have begun their own record labels.<sup>55</sup> The Philadelphia Orchestra has even set up its own downloading service where listeners can obtain recordings made by the group directly from their web site.<sup>56</sup>

When Nielsen's 2006 recording sales results were announced, a number of journalists and bloggers jumped on the classical music statistic. *New Yorker* critic and author Alex Ross posted an entry on his blog entitled "Who Killed the Death of Classical Music?" (evoking a kind of counterbalance to Lebrechtian doom) in which he considered possibilities for the rise in classical music sales.<sup>57</sup> Ross, as well as others, attributed at least some of this growth to the online classical music market – and digital downloading in particular.

Of course, the ability to download music in file-form is rapidly changing the way all types of recorded music are sold (or stolen) and listened to. The purchase of music in the form of physical objects (CDs) is declining steadily while the amount of music that is digitally downloaded continues to rise. For at least a few years now, the embrace of digital formats appears to have been accepted as the future of the popular music recording industry. However, with classical music, a number of doubts have remained: classical music fans may not be "tech-savvy" enough to download music; they may find the reduced audio quality of digital music unacceptable; classical music is difficult to categorize in the "song" and "artist"

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<sup>55</sup> See <http://www.lso.co.uk/>; <http://www.sfsymphony.org/>; and <http://www.cso.org/>.

<sup>56</sup> See <http://www.thephiladelphiaorchestra.com/>.

<sup>57</sup> Alex Ross, "Who Killed the Death of Classical Music?" *The Rest is Noise* (blog), Jan. 6, 2007, [http://www.therestisnoise.com/2007/01/the\\_death\\_of\\_th.html](http://www.therestisnoise.com/2007/01/the_death_of_th.html).

format used for most digital music and consumers will, therefore, have trouble finding what they want; classical “tracks” are not necessarily equivalent to pop music “tracks” (i.e. 1 track could be a 45 second variation on a theme *or* a 30 minute symphonic movement) and, consequently, not suited for digital music’s prevailing pricing structures; and the list could go on.<sup>58</sup> Despite these doubts, in recent years digital downloads of classical music have continued to increase and have become a large part of the market. As Nielsen SoundScan’s 2006 numbers suggest, downloading has revealed a desire for classical music among the listening public much greater than that imagined by many of the foretellers of the music’s imminent demise.

In this chapter, I will address the phenomenon of classical music downloading and what it means in contemporary society. As was true for the examination of Pandora’s internet radio in my previous case study, studying music downloading is important because it reveals fundamental changes in the listener’s relationship to classical music. Many barriers that have traditionally stood between listeners (and/or potential listeners) and recordings of classical music are lessened or eradicated in the downloading world. These barriers include practical concerns like price and availability as well as less tangible factors such as classical music’s perceived elitism, impenetrability, and/or sheer “geekiness.” As businesses use the internet to find new ways of selling classical music these obstacles are being addressed and overcome. By taking a look at these new business models and new ways of approaching music on the part of listener we have an opportunity to examine the changing role of classical music as part of a changing society.

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<sup>58</sup> For a foray into some of these problems see Anne Midgette, “Adventures in Downloading Haydn,” *The New York Times*, 15 June 2003, <http://query.nytimes.com/gst/fullpage.html>.

## Downloading Classical Music

Writing for *Symphony* magazine in the pre-iPod ages (spring of 2000), Rebecca Winzenried considered the potential impact of MP3s, wondering if “a hot trend for pop tunes [is] necessarily of any interest to the classical music world?”<sup>59</sup> In the article, she treads a middle ground, pointing out that there is great potential for the new digital format, but also noting that “quite honestly, there hasn’t been a lot of classical music out there on MP3.” Winzenried also questions the format’s longevity and appeal to classical listeners. Despite her balanced stance on the possible significance of the MP3 she does point out to her *Symphony* readers that the issue “isn’t so much about MP3 at all; it’s about an overhaul in the way music is distributed to consumers. And that has a potentially major impact on the way orchestras record music and connect with their audiences.”<sup>60</sup>

A lot has happened since Winzenried’s article was published. The rise and fall of the “all you can eat” free music buffet on Napster brought worldwide attention to digital music files,<sup>61</sup> and since 2003 iTunes and iPods have become a ubiquitous presence in everyday life (at least in the Western world). There has been a digital music revolution in the past few years, and classical music listeners are definitely participating. In fact, while sales of classical recordings have traditionally accounted for about 3% of the market, around 10% of

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<sup>59</sup> Rebecca Winzenried, “I Want my MP3!” *Symphony*, March/April 2000; 24-26, 48-49.

<sup>60</sup> Ibid.

<sup>61</sup> Developed by two college students in 1999 Napster was a network that facilitated file sharing (mostly of music files) between any computers with an internet connection and the Napster software. Until it was shut down in July 2001, a breathtaking diversity of music could be found and downloaded for free using the service. There has been much written about the rise and fall of Napster, for example see Joseph Menn, *All the Rave: The Rise and Fall of Shawn Fanning’s Napster* (New York: Crown Business, 2003); and Trevor Merriden, *Irresistible Forces: The Business Legacy of Napster and the Growth of the Underground Internet* (Oxford: Capstone, 2001).

the music downloaded from Apple's iTunes store is classical.<sup>62</sup> Additionally, some sellers who focus exclusively on classical music are thriving. Naxos Records, founded in 1987 as a budget classical label, placed its entire catalogue online in 1996 before downloading digital music had even become a phenomenon. In the early 2000s many Naxos recordings became available as digital downloads through various internet retailers, and, more recently, Naxos has begun offering a subscription service allowing internet streaming of their catalog for a monthly fee. This has proven to be highly successful. In fact, the company's founder Klaus Heymann, told Alex Ross, "Honestly, until about two years ago, for me this whole music business was a hobby, an expensive hobby. Only since 2006 or 2007 has there been a piece of return on the investment, through the digital." As Ross reports, digital downloads now account for 25% of the company's revenue.<sup>63</sup> Another sign of the times can be seen through the example of the BBC. In the summer of 2005, they offered digital versions of all of Beethoven's nine symphonies for free on their website. Outlandishly exceeding their expectation of 25,000 downloads, close to 1.5 million listeners partook in this "Free-thoven" experiment.<sup>64</sup>

Obviously, classical music listeners are downloading music. What I want to address now is how that affects their relationship to the music. How are people, at present, using the

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<sup>62</sup> I have seen different percentages given (for example, Anne Midgette and Allan Kozinn, both writing for *The New York Times* report classical as 12% of iTunes' sells, while Alex Ross does not give exact figures) and, of course, these kind of numbers fluctuate. But, nobody disputes that classical music downloads represent a larger share of the market than their CD counterparts. See Anne Midgette, "Classics on the Internet," *The New York Times*, 8 February 2006, <http://www.nytimes.com/2006/02/08/arts/music/08anda.html>; and Allan Kozinn, "Check the Numbers: Rumors of Classical Music's Demise are Dead Wrong," *The New York Times*, 28 May 2006, <http://www.nytimes.com/2006/05/28/arts/music/28kozi.html>; Alex Ross, "The Well Tempered Web," *The New Yorker*, 22 October 2007, [http://www.newyorker.com/reporting/2007/10/22/071022fa\\_fact\\_ross?currentPage=all](http://www.newyorker.com/reporting/2007/10/22/071022fa_fact_ross?currentPage=all).

<sup>63</sup> Alex Ross, "The Well Tempered Web".

<sup>64</sup> See Anne Midgette, "Classics on the Internet".



internet to find, purchase, and interact with classical music recordings, and what differs significantly between these new trends and older ways? How, specifically, are the aforementioned barriers between classical music sellers and buyers being overcome? What does all this say about classical music in society? To help answer these questions, we will now take a virtual trip to Sweden.

### **eClassical.com**<sup>65</sup>

In addition to speculating about the future of the MP3 in her 2000 article for *Symphony* discussed above, Rebecca Winzenried profiled a few websites who were beginning to offer classical music in digital form. The only site in this list devoted exclusively to classical music was the one-year-old Swedish-based internet company eClassical.com – which Winzenried touted as “One to watch.”<sup>66</sup>

Eight years later, after having weathered the “dot com bubble”<sup>67</sup> and witnessing iTunes’ rise to digital music domination, eClassical.com is still at it (and growing, year by year). The site is one of the few on the internet to concentrate exclusively on classical music and exclusively on MP3 downloads. This singularity of focus coupled with the site’s relative longevity (9 years is a long time in the digital music world) mean that it has had to work closely with classical music downloaders and refine its service to best suit their needs. The site, therefore, provides an enlightening case study of the business of digital classical. I should point out that while eClassical.com provides a useful example, it is *not* the only site

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<sup>65</sup> [www.eclassical.com](http://www.eclassical.com)

<sup>66</sup> Rebecca Winzenried, “I Want my MP3!”

<sup>67</sup> The “dot com bubble” refers to the sharp rise in stock market value in the late 90s (up to 2001). The founding of many new internet companies and large availability of venture capital created an unsustainable economic growth – and, in the early 2000s many of these “dot com” companies failed (including a number of music related ones).

on the internet that could be used to illustrate these points – some of the trends I will consider are becoming the standard for many sites selling classical music recordings.

Ever since the first commercially available classical music recordings, there have been businesses devoted to selling these recordings. Through the years these businesses have changed with the times moving through a number of different technological media (the 78, the LP, tape, CD) and incorporating many different marketing strategies. Despite the efforts of classical music sellers, however, a number of barriers have remained between them and potential buyers. Now the business of selling classical music recordings is changing more rapidly than ever, particularly on the internet as companies take advantage of a world of new possibilities (such as selling MP3 downloads rather than physical recordings). In doing so, companies like eClassical are attempting to address the barriers that have existed in the past. I will examine the way in which eClassical.com deals with six of these barriers. By taking this approach, I do not intend to argue that eClassical has eradicated all obstacles and completely democratized classical music. Rather, I will use this exploration of the strategies employed by one company to open up a space for the consideration of the broader implications of these strategies. How is eClassical's response to the practical problems of the classical music market indicative of changing attitudes and perceptions towards the music? What can its business model illuminate about less tangible factors that affect peoples' relationships with classical music?

### **Breaking Barriers**

Looking at the situation from a practical business point of view, buying classical music recordings has been a potentially daunting endeavor in the past for at least six reasons:

1. High price
2. Inability to experiment
3. Prior knowledge required (about composers, performers, etc.)
4. Confusing categorization schemes
5. Limited availability (because classical recordings do not sell as many as pop recordings they are not stocked in the same numbers or as consistently)
6. Marketing tactics that alienate some consumers

The first two points on the list go together in many ways. Classical CDs (or LPs and tapes in times past) can often be pricier than popular CDs. Exacerbating this problem is the fact that many classical recordings (of entire operas or a set of string quartets, for example) are quite long and require multiple discs, which, naturally, will cost more. Of course, budget labels such as Naxos try to provide a counterbalance to this, but they may not offer what a particular buyer is looking for (and some also question the quality of performance on lesser-priced recordings). The problem of price may not be such a serious one for people who know exactly what they want (i.e. “I know this performance of Simon Rattle conducting Mahler’s 2<sup>nd</sup> is great – it’s worth paying for”), but for consumers less experienced, and particularly for those coming to classical music for the first time, the problem becomes particularly acute. The ability to experiment with classical music without having to make a major financial investment is crucial for many potential classical music buyers.

eClassical.com attempts to address this issue in a number of ways. As with most services offering downloads of recorded music, consumers usually pay less for digital files than they would for the same amount of music on CD. Also similar to other services, they offer music on a track by track basis (i.e. one track on a CD equals one file). But whereas

Amazon.com or iTunes usually charges \$0.89 or \$0.99 per track, eClassical generally charges between \$0.49 and \$0.79 per track. Additionally, when downloading from iTunes, customers frequently encounter the “7 minute rule,” which means that many tracks exceeding 7 minutes in length are not available unless one buys the entire album. Being that a large percentage of tracks on classical recordings run longer than 7 minutes, eClassical does not have such a policy. For the most part, any track of any length can be downloaded as one file (though tracks running over 20 minutes often cost \$0.99). It is easy to see how price becomes much less restrictive for the classical music buyer than it had been in the past (and how a specialized store makes it even less so).

The ability for the consumer to experiment with unfamiliar music is an important change in the world of classical recordings, and eClassical.com actively encourages this kind of experimentation. Beyond offering 30 second sample clips (as every download service does) and making music affordable, the site offers a rotating selection of free titles. These not only provide an opportunity to hear potentially unfamiliar music, they also give listeners a chance to hear the sound quality of files offered by the site before purchasing anything.<sup>68</sup> To further encourage experimentation, eClassical.com will refund any purchased music for any reason, including “I just didn’t like Phillip Glass as much as I thought I would.” Furthermore, the site’s “weekly specials,” usually 2 or 3 CDs worth of music for \$5.99, lead consumers to buy music they may not even know about otherwise. For example, the site’s best seller for the first part of 2008 was a group of recordings of the 4 symphonies by little

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<sup>68</sup> As a side note, the MP3s offered by the site are encoded at either 192kbit/s or 320kbit/s. Users are also invited to take a “Blind Listening Quiz” in which they rank 5 examples of the same excerpt by sound quality. The examples are encoded at different bit rates (128, 160, 192, 320, and CD quality WAV) – users have to email the site’s directors to get the answers to the quiz. For comparison, most downloads offered by iTunes are encoded at 128kbit/s (see footnote 39 on p. 31 for further explanation), while those offered by Amazon.com are usually 256 kbit/s. The Blind Listening Quiz can be found at <http://www.eclassical.com/eclassic/eclassical?&page=blind%5ftest>.

known French composer Albéric Magnard. “We didn’t see that one coming,” the site’s technical director Rikard Froberg told me. He attributes these sales primarily to the fact that Magnard’s symphonies were featured as one of the site’s weekly specials.<sup>69</sup> While I would agree with Froberg’s belief that Magnard’s popularity on the site was due to the price of the recordings, I would add that it is also evidence that a substantial number of eClassical’s customers are not only willing to experiment, but that this willingness extends to composers outside of the generally accepted “canon” (either because consumers disregard the notion of canonical quality, or because they simply do not know that Magnard is not part of this canon). I will explore the significance of this later in the paper. Finally, with regard to the cost of recordings, eClassical.com has a collection of entire works that they offer for \$0.99. These are especially appropriate for newcomers to classical music who can own a recording of Mozart’s “Jupiter” Symphony or Schubert’s “Great” Symphony for a dollar. From the ability to sample music for free to the prospect of owning all of Beethoven’s symphonies for the price of a normal CD, the capacity to experiment with all kinds of classical music without burdensome financial investment creates a world of new possibilities for classical music listeners.

Access to information has been another deterrent for potential classical music buyers in the past. Someone without previous knowledge of a composer or performer would be highly unlikely to walk into a retail store and purchase a CD of their music. And, even if a customer possessed some prior knowledge about a particular composer, there might still be a lack of comfort in buying a recording of unfamiliar works, at least if no background information about those works was readily available. eClassical.com offers biographical profiles for most of the composers in its database, as well as information about individual

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<sup>69</sup> Rikard Froberg, email correspondence 16 February 2008.

soloists, conductors, orchestras, and ensembles in an attempt to allow customers to make informed purchases. It features an “eClassical dictionary” as well, with explanations of hundreds of classical music related terms. And, for those looking for the basics, the site offers a relatively brief “Introduction to Classical Music,” and a how-to essay entitled “How to Enjoy a Classical Concert.” “Ask Giovanni” is another feature offered by eClassical.com through which users can ask any question about classical music and receive an answer in the form of an email reply.

Moreover, the classical music files provided by many downloading services have been seen as inadequate by a number of classical listeners because of a lack of certain kinds of information. As Anne Midgette asks in a *New York Times* article, “Does anyone really want to ... spend \$40 on a download of a complete ‘Gioconda’ that comes without a reliable cast list or libretto?”<sup>70</sup> eClassical attempts to remedy this situation not only by providing information about the specific works and performers on a recording, but also by offering PDF files of liner notes (whenever available) to accompany the music files. This availability of information can make downloading classical music a more worthwhile pursuit for aficionados and a more comfortable experience for those not as well versed. It may also pique an interest in little known works or composers – such as Albéric Magnard.

Somewhat related to the problem of information availability is one of categorization. Whenever and wherever recordings are sold they must be categorized in some manner. Classical music, however, is fundamentally difficult to categorize. In a large retail store, such as Borders or Barnes & Noble for example, classical recordings will be organized according to composer – unless a recording features a well-known soloist, in which case it may be in the “artist” section; or if it is an opera, it may be filed in its own section; or if it

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<sup>70</sup> Anne Midgette, “Adventures in Downloading Haydn”.

contains works from different composers, it may be filed as a “compilation.” This is not to mention that there are sometimes instrument (and voice) collections filed separately as well as music categorized by era of composition. These complications do not exist only in the “physical” world, either. Downloading services, for the most part, have been built around a popular music based “song and artist” paradigm. Determining who the “artist” is on most classical recordings is a tricky process – is it the composer, the soloist, the orchestra, the conductor? “Songs” are similarly difficult – should one search for the work’s title, opus number, cataloguing scheme number (i.e. Köchel numbers for Mozart works), the performance marking at the beginning of a movement (Andante, Allegro, etc.), or various nicknames that a piece may have? And further problems are introduced because of the different languages involved. Will a work be found under its German title, or a translated title, is it *The Magic Flute* or *Die Zauberflöte* - and what about different spellings of proper names, is it Rachmaninoff or Rakhmaninov? In the previously mentioned *New York Times* article, Anne Midgette describes searching for a particular Russian composer on iTunes: “There are 10 different listings for Tchaikovsky, from Piotr Ilytch to just plain Peter.”<sup>71</sup> The categorization classical music is wrought with many complications that do not necessarily exist for popular music and are, therefore, not dealt with effectively by many downloading sites.

eClassical.com approaches the issue by allowing users to search or browse its selection in 12 different ways – by title, composer, performer, conductor, instrument, orchestra/ensemble, moods & events, compilations, period, genre/style, new titles, and “recommendations.” For customers, this creates a much more direct route between them and the recordings for which they are searching – which leads to the next point.

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<sup>71</sup> Midgette, “Adventures in Downloading Haydn”.

What recordings are customers searching for? The answer is many different ones. Responding to my inquiry about buying habits on eClassical.com, the site's technical director Rikard Froberg told me that "the long tail theory applies to us. We sell a great deal of single purchase pieces – pieces that only one customer buys."<sup>72</sup> The "long tail theory," as I mentioned earlier refers to the belief that the future for many businesses is selling "less of more." Successful companies like Amazon.com and Netflix, who trade in small quantities of *many* different items, are good examples.<sup>73</sup> The principle is especially applicable to companies selling music downloads. Since they are selling files and not physical items, "stock" space is virtually unlimited.<sup>74</sup> Keeping a recording of Ivan Wyschnegradsky's microtonal music in a collection, which may only sell once a year (or less), is not restricting the space available for a more lucrative product. Therefore, downloading services can potentially profit by 1000 "one time" purchases just as they would by selling 1000 copies of the same work. The significance of this "long tail" phenomenon for the consumer is a vastly increased availability – which is crucial when dealing with the diversity of classical music. The most eccentric listeners can find their tastes on a site like eClassical.com, and because of the nature of digital music, even the rarest titles will never be "out of stock."

Finally, there have been problematic marketing strategies used by sellers of classical music in the past, attempting to reach audiences consisting of unnatural extremes – either high-culture elites or musical "know nothings." As musicologist Robert Fink describes in a

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<sup>72</sup> Email correspondence.

<sup>73</sup> See Chris Anderson's blog at <http://www.thelongtail.com> for more information on the theory. Also, see [http://www.longtail.com/the\\_long\\_tail/2006/07/my\\_new\\_wave\\_hai.html](http://www.longtail.com/the_long_tail/2006/07/my_new_wave_hai.html) for the story of his new-wave band Egøsläviä, and how they were named by REM.

<sup>74</sup> Digital files such as the MP3 are known as nonrivalrous resources, meaning that their use by one party does not restrict their availability to another party. For a discussion of the MP3 as a nonrivalrous resource see Mark Katz, *Capturing Sound* (Berkeley, California: University of California Press, 2004) 163-164.



short piece about a trip to a Borders retail store, the majority of the classical recordings are clearly separated from the rest of the music and somewhat perplexingly categorized on the left-most wall of the music section (“studies show that consumers overwhelmingly turn to the right as they enter a new space,” he claims). On the other hand, a few towering kiosks in the middle of the music section contain recordings with brightly colored album covers and titles like “Mahler for Dummies,” “Mozart for Relaxation,” and “The Only Opera CD You’ll Ever Need!”<sup>75</sup> Many early downloading sites reflected these extremes. Some specifically classical sites tried to construct a “highbrow” image through their design and language, which made them appear elitist and inaccessible to potential consumers. On the other hand, some popular music services offered only a limited selection of classical recordings which were often of questionable quality.<sup>76</sup>

The “average” consumer is likely not an expert or a “dummy.” Thus, marketing strategies that target these extremes may alienate people, and perhaps, turn them away from classical music altogether. In an article for the *New Yorker*, Alex Ross talks about “culturally aware non-attenders.” These are people (including most of Ross’s friends, he claims) who know something about classical music, but do not participate in its culture. Whenever the subject comes up, he says, they are often given to “serene declaration(s) of ignorance.” “It is not their fault,” Ross writes, “centuries of classical intolerance have gone into the creation of the culturally aware non-attender.”<sup>77</sup> What Ross is getting at is that there is a substantial

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<sup>75</sup> Robert Fink, “Marketing Classical Music,” in Ellen Koskoff (ed.) *Music Cultures of the US: An Introduction* (Routledge, 2005) 50-54.

<sup>76</sup> See Rebecca Winzenreid’s “I Want my MP3” article in *Symphony* where she talks about trying to download the “Moonlight” sonata from MP3.com in 2000. Also, Anne Midgette’s recounting of her experience with the failed website Musicmaker.com is instructive (Midgette, “Adventures in Downloading Haydn.”)

group of people who are generally interested in and curious about many types of cultural and artistic expressions, people who are by no means “dummies,” but still feel compelled to keep their distance from classical music. As Ross puts it, “for at least a century the music has been captive to a cult of mediocre élitism that tries to manufacture self-esteem by clutching at empty formulas of intellectual superiority.” This attitude makes many would-be listeners utterly uncomfortable, and, as a result, they feel “unqualified” to delve into classical music’s possibilities. The people represented in this group are the same potential buyers who have traditionally been turned away from classical music recordings by the marketing tactics employed to sell them.

The designers of eClassical.com attempt to utilize a more neutral approach. The site’s layout and appearance is simple and characterized by “quiet” colors and small pictures. There are no flashing neons or blatant attention grabbers, and there are no red curtains or adjectives that require an *Oxford American Dictionary* close-by. Also, other than a link to its “weekly special” and a few “special offers” at the bottom of the page, there is no apparent attempt to influence *what* the consumer will buy. As a result of the “long tail” principle mentioned above, a site like eClassical.com does not have to sell big “hits” to be successful, and can, therefore, shy away from aggressive marketing tactics that may distance potential customers. Their projection of neutrality appears to be designed to encourage the classical newcomer and the expert alike – and the “culturally aware non-attender” fits comfortably in between.

The way that a business such as eClassical.com responds to the six issues I have raised here (cost, ability to experiment, information, categorization schemes, availability, and

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<sup>77</sup> Alex Ross, “Listen to This,” *The New Yorker*, 16/23 February 2004, accessible online at [http://www.thereisnoise.com/2004/05/more\\_to\\_come\\_6.html](http://www.thereisnoise.com/2004/05/more_to_come_6.html). Ross claims that he took the phrase “culturally aware non-attender” from an article in *Symphony* magazine (he does not cite the specific issue).

marketing strategies) points to a new kind of relationship between classical music and those who buy it in recorded form. Ultimately, endeavoring to buy classical recordings becomes a more comfortable experience for a greater percentage of the population. Although this may seem, on the surface, to have no drawbacks, some could raise exceptions with regards to eClassical.com.

First, one of the reasons that eClassical.com can offer music so affordably is that they do not deal with major labels. All of the music offered on their site is produced by smaller independent companies such as BIS, Hänssler Classic, Signum, and Proprius. Some detractors claim that these labels, without the same kind of funding as the “majors,” cannot afford to produce the highest quality performances from the best artists.<sup>78</sup> The truth of such a claim, of course, is not objectively measurable. In the end, it must be left to the consumer to judge the quality of performance.

Coming from a different angle, some could argue that eClassical.com’s singularity of focus strengthens the notion that classical music is “separate” from all other music. Elsewhere in this paper, I argued that one of the major forces the internet exerts on classical music is an integrative one – that the music’s claim to autonomy (dating back at least to the 19<sup>th</sup> century) is exposed as a myth when classical is forced to confront other genres. Does not eClassical’s approach merely support these claims to autonomy?

I would have to argue that it is simply a business approach that works for them, and while, yes, the site does *only* offer classical music, there is nothing about the way it is presented that bespeaks of an inherent claim to superiority. In fact, the site provides links to other websites offering MP3 downloads of popular music. The singularity of focus also allows the service to offer some classical-specific advantages that other sites may not. For

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<sup>78</sup> See Norman Lebrecht, “Look Who’s Been Dumped.”

example, often on CD recordings of certain pieces a silence will be added between movements that would normally flow together in live performance. eClassical.com actually removes these silences and offers the movements as an one uninterrupted file.

Finally, the service can be a bit complicated to use. Because they do not require additional software to be downloaded, when something is purchased it is sent to the customer as a link in an email. Some email services filter these messages as “spam,” creating another level of complication. For the most part, however, the exchange works reasonably well, and this somewhat circuitous process is more a hassle than a problem.

### **eClassical in Context**

Looking how eClassical responds to the challenges of reaching consumers (and potential consumers) gives us a picture of the new ways that classical music can reach an audience. Making the music more affordable and more accessible through available information, easier categorization schemes, and increased availability can attract new listeners and revivify the interests of old listeners. Neutral marketing strategies can also work to mollify those who are curious about classical music but have been turned away in the past by the apparent extremes towards which classical recordings have been directed. Whether all of this will result in a vastly expanded audience for classical music it is difficult to say. But that is not really what is at issue. More importantly, we need to understand the significance of internet retailers such as eClassical by putting them in an historical context. A number of technological and business-related developments have purported to have considerable impact on classical music and its audiences. Most importantly, perhaps, is the example of the phonograph.

Musicologist Mark Katz has written about how the phonograph was upheld in its early years as an enabling force to facilitate the true musical “progress” of Americans. Many believed that the phonograph would bring “good music” (read: “classical music”) into the homes of the general American public. As Katz points out through his examination of contemporaneous writings and advertisements, people who owned phonographs and listened to “good music” were considered civilized, “cultured,” and of sophisticated tastes.<sup>79</sup> Thus, although the development of the phonograph was momentous for classical music, the focus in those days was not necessarily on selling *music* as much as it was on selling culture, status, refinement, and the like. Similar attitudes have pervaded much about the business of selling classical music up to the present day. Most download retailers like eClassical, however, take a completely different approach. They focus exclusively on music. The consumer does not buy refinement or culture when making a purchase on eClassical, and the company has no investment selling such “extra-musical” wares. (It would be pretty hard to display an MP3 of a Mozart sonata as a “status symbol.”) This fosters a fundamentally different relationship between consumers and their music. They are not made to feel inept or uneducated if they do not like certain music as was Phillip Gibbons in 1921 when he responded to a questionnaire sent out by the Edison Phonograph Company about listening to “higher class” records saying, “possibly after two or three thousand years our progeny may get far enough advanced to appreciate what we fail to understand.”<sup>80</sup> Similarly, listeners are not necessarily made to feel more educated or more “civilized” if they do like certain classical pieces. Layers of posturing, stigmatization, and extra-musical baggage are stripped away from classical music

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<sup>79</sup> Mark Katz, *Capturing Sound* (Berkeley, California: University of California Press, 2004) 48-71.

<sup>80</sup> Phillip S. Gibbons, response to Thomas A. Edison, Inc., questionnaire, 21 February 1921, collection of the University of Michigan Libraries. Quoted in Katz, *Capturing Sound*, p. 56.

when it is sold by a retailer such as eClassical, and this is highly significant, whether it brings scores of new listeners to the music or not.

Before concluding, I want to point out how this examination of eClassical fits into the context of the broader themes in this paper – musical tastes, technology, and eBusiness.

Although eClassical does not collect personal data about their users, there are a few interesting items that provide insight into the musical tastes of their customers. For one, the success of Albéric Magnard that I mentioned earlier illustrates vividly the willingness of eClassical customers to experiment with music that is not only unfamiliar, but non-canonical. The site's technical director Rikard Froberg told me that the company received quite a bit of correspondence from customers who were "happy to meet this new acquaintance."<sup>81</sup>

Consumers who use the site seem to be actively seeking music of which they were previously unaware. This fits into a broader picture of musical taste that emerges through the internet where listeners are generally curious about a wide variety of music and always willing to experiment. Chris Bell, director of music marketing for Apple's iTunes told Alex Ross in 2007 that that service sells just as much hip-hop to customers who also buy classical music as it does jazz.<sup>82</sup> Whether it is purchasing the music of relatively unknown composers or buying music from widely divergent genres, those who download classical music on the internet appear to be unpredictable and open to experimentation.

Additionally, eClassical offers optional user surveys on its web site. While the results of these surveys should not be treated as infallible data, certain findings are worth mentioning. Looking at the age of eClassical's customers is especially interesting. Their survey divides age groups into decades, and it shows that, among survey participants, there

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<sup>81</sup> Rikard Froberg, personal email correspondence 16 February 2008.

<sup>82</sup> Chris Bell quoted in Alex Ross, "The Well-Tempered Web" *The New Yorker* (22 October 2007).

are more users in the 20 to 29 year age range than there are in any other ten year group. This is a fascinating statistic and a promising prognosis for the future of classical music. Klaus Heymann, the founder of Naxos records, corroborates the indication that classical music is appealing to a younger audience. He claims that half of the 11,000 users of Naxos' subscription service are under the age of forty.<sup>83</sup> This evidence suggests that a substantial number of young people include classical music as part of their musical tastes.

Beyond musical tastes, it is apparent that new technologies have opened up a world of possibilities for companies such as eClassical. The MP3, as a nonrivalrous resource, allows for music to always be "in stock."<sup>84</sup> Eliminating the cost of physical packaging, storage, and shipping also permits the sale of classical recordings at significantly discounted prices. Furthermore, an online retailer like eClassical can categorize inventory in virtual space rather than physical space which offers the consumer multi-dimensional search possibilities (by composer, title, performer, label, etc.). And, because of advancement in data storage and computer processing power, there is virtually no limit to how much product an online retailer can keep in stock. eClassical claims, for example, to offer recordings of works from more than 1000 composers.

Finally, as the longest running site on the internet devoted exclusively to MP3 downloads of classical music, eClassical provides a model for a successful working relationship between classical music and eBusiness. The "long tail" theory that a company can profit by selling "less of more" is manifest in the company. Related to this is the new paradigm of "quality" that was discussed briefly in the introduction. According to Chris Anderson, author of the book *The Long Tail*, there are two different conceptions of "quality."

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<sup>83</sup> Ibid.

<sup>84</sup> A nonrivalrous resource being one in which use by one party does not restrict availability to another party.

The traditional conception involves a product made up of what are purported to be the best “ingredients” available – with regards to music this would mean the best symphony, recorded by the best orchestra, conducted by the most famous conductor, recorded by the best engineer, etc. The other conception of quality is best described as “relevance.” In this paradigm, consumers are seeking goods that are most relevant to their current needs and desires. This means that a \$0.99 recording of a complete Beethoven symphony by a relatively unknown orchestra has “quality” for a classical music novice who is interested in Beethoven but who would not spend \$20.00 for a recording of the Fifth Symphony. eClassical operates on this principal to a large extent, and it is a business model that allows them to make classical music affordable and accessible.

When eClassical is contextualized within the forces of musical tastes, technology, and eBusiness on the internet we see that its service sheds light on new perceptions, beliefs about, and experiences with classical music. By stripping away much of the artifice that has surrounded the business of classical music in the past, companies like eClassical provide a model in which the music stands on its own and listeners come to it on their own terms. The success of this model shows us that there is much demand for classical music and many people who find it deeply meaningful in their lives – as long as they are not told *what* it should mean.



## **Conclusion**

In October 2007 Alex Ross published an article in *The New Yorker* entitled “The Well-Tempered Web.” Though he paints classical music’s relationship with the internet in a positive light he reminds us that:

Those who see the dawning of a new golden age should bear in mind the ‘Snakes on a Plane’ rule: things invariably appear more important on the internet than they are in the real world.<sup>85</sup>

For Ross, this comment adds balance to his otherwise highly optimistic rhetoric and perhaps draws a chuckle from his readers. There is, however, more to this small remark than may be immediately apparent. Ross, one of the most prominent classical music critics of the day expects – or rather, takes for granted – that his well-educated *New Yorker* audience knows the “‘Snakes on a Plane’ rule.” *Snakes on a Plane* is the 2006 film that *Village Voice* critic Jim Ridley called “the year’s most shameless B-movie” – an intentionally non-cerebral, vulgar, and unabashedly commercialized affair.<sup>86</sup> Before its release, hype about the movie was ubiquitous on the internet, creating expectations for its financial success that were proven grossly exaggerated by its weak box office performance. The fact that Alex Ross believes his readers will be familiar with such a film and the story that surrounds gives an indication of what Ross thinks about the makeup of today’s classical music audience, and it

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<sup>85</sup> Alex Ross, “The Well-Tempered Web,” *The New Yorker* (22 October 2007) online at [http://www.newyorker.com/reporting/2007/10/22/071022fa\\_fact\\_ross?currentPage=all](http://www.newyorker.com/reporting/2007/10/22/071022fa_fact_ross?currentPage=all).

<sup>86</sup> Jim Ridley, “Slithering Heights,” *The Village Voice* (15 August 2006) online at <http://www.villagevoice.com/film/0634,ridley,74226,20.html>.

suggests they are tuned into popular culture just like much of the rest of the “general public” (another example of omnivorism). Though this may have always been true to some extent, it would not have been so openly assumed and explicitly stated by most of the classical music critics of the last century or so. Moreover, Ross’s “Snakes on a Plane” comment reveals something else – the belief that, on the internet, the “rules” applicable to a cultural expression such as *Snakes on a Plane* are equally applicable to classical music.

Alex Ross’s statement also provides another significant point of note. The critic, as many have before him, clearly differentiates between the internet and the “real world.” It is as if the attention that was given to *Snakes on a Plane* on the internet is somehow less “real” than the attention given to it in movie theaters (less financially lucrative for its producers, yes; but, less “real?”). I do not mean to criticize Ross. His statement was merely an effective way to make a point and, in its context, does not warrant this level of scrutiny. However, removed from the context of the original article, the remark illuminates questions that have been central to the present project. Is the internet fundamentally separate from the real world? Is classical music’s existence on the internet somehow less real than its existence outside of the internet? Of course, these kinds of questions can potentially lead to an endless existential debate. Nevertheless, I raise them to make the point that as more people continue to spend more time on the internet, the distinction between “internet” and “real” becomes increasingly blurred. No one would argue that the sound produced by eClassical.com’s Mp3s is not real, or that when I talk to my friends about Pandora playlists our conversations are not part of the reality of our experiences. As we move towards the future, the internet will become more and more a part of classical music’s reality.

Despite my scrutiny of his words, however, the point Alex Ross is trying to make is an important one. Like most technological innovations, it is easy to exaggerate the internet's potential for large scale change. Technology's effect on society, and similarly the internet's affect on classical music, is neither utopian nor dystopian.<sup>87</sup> Websites like eClassical and Pandora are not causing huge masses of the human population to have monumental musical awakenings – all of the sudden realizing the insatiable taste for classical music they never knew they had. Neither are they bringing about the death of a once venerable tradition by exposing it to the mire of unfiltered (non)culture that is the internet. The changes enacted by these websites (and many more like them) are much more subtle and gradual – and, what will result from these changes remains to be determined. It is ultimately a matter of how people involved with classical music approach, utilize, and incorporate technological, economic, and musical taste transformations – such as those discussed in this paper – that will determine to what extent the internet impacts the life of the music (positively or negatively). People, not the internet, will determine the course of classical music's future.

People are exerting their determining powers through the forces of technology, eBusiness, and musical tastes. The interconnections between these forces are facilitating a changing relationship between classical music and its listeners of which we see evidence almost every day. Take the recent example of the site eMusic.com, an online download store similar to iTunes. The site keeps track of their best sellers in different genres and posts charts on their site. In March 2008, the Pacifica Quartet's recording of String Quartets Nos. 1

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<sup>87</sup> For a balanced discussion of the effects of technology (especially sound recording technology) on music see Mark Katz, *Capturing Sound: How Technology has Changed Music* (Berkeley and LA, California: University of California Press, 2004).

and 5 by “that easy listening phenom” Elliott Carter topped their classical charts.<sup>88</sup> How could this happen? The technologies of the MP3 and advances in data storage capacity make it feasible for eMusic to have this recording available, while the principles of the long tail theory say that it is likely a good idea, business-wise, to have this recording on hand, despite its supposed status as a “super-sub-niche” item. And when consumers’ increasingly experimental and unpredictable tastes come into play, the Elliot Carter recording becomes a success.<sup>89</sup> This anecdote is even more significant when one takes into account the fact that about a third of eMusic’s classical customers are people who have never downloaded a classical piece before.<sup>90</sup>

The example of Elliot Carter’s recording on eMusic is but one example of many that could be offered to show the interweaving of the forces of technology, taste, and eBusiness, and the nature of the changes being brought to classical music. At their root, these changes revolve around an approach where listeners are free to approach classical music however they wish. When listeners are not told that they *should* prefer Bach or Mozart, they may decide that they prefer Magnard or Carter. When they are listening to Beethoven for entertainment, and not necessarily for its cultural value, they may decide that they like to hear Beethoven on a radio station that plays the Beatles as well. While I do not claim that this trend of giving the listener control is fundamentally positive or negative for the future of

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<sup>88</sup> The quote comes from critic Justin Davidson, see his post on *The Rest is Noise* blog, Justin Davidson, “Carter Tops the Charts” *The Rest is Noise* (17 March 2008) <http://www.therestisnoise.com/2008/03/carter-tops-the.html>.

<sup>89</sup> It is worth mentioning that the long tail theory also means that the definition of “success” is different than in the past. The Carter CD can “top the charts” even by selling just a few copies. Additionally, the recording was offered as a discounted promotion. Even still, the point that some consumers are increasingly willing to give “way out of the mainstream” music a chance remains valid.

<sup>90</sup> John Pitcher, “Classical Music is Enjoying Mini-Comeback Thanks to the Internet” *Omaha World-Herald* (16 March 2008) accessible online at [http://www.omaha.com/index.php?u\\_page=2620&u\\_sid=10284362](http://www.omaha.com/index.php?u_page=2620&u_sid=10284362).

classical music, it does allow classical music to accrue new meanings for new times, and, therefore, remain continually vital – even in a world seemingly dominated by pop culture.

As critic, professor, composer, and blogger Greg Sandow points out in one of his blog posts:

Smart people in popular culture are culturally curious. They want to find things they haven't known before. They'll try almost anything, and, very often, if something's not popular, if it's a niche taste that few people have, that's a plus.<sup>91</sup>

He notes that money is poured into classical music outreach efforts, but these efforts do everything but reach the “culturally curious” who form a large potential audience for classical music. Often those who design these efforts “don't understand that our culture has changed, and that classical music (as it's presented in the classical music mainstream) can't have the same meaning, or the same appeal, that it used to have.”<sup>92</sup> Examining the convergence of technology, business, and musical taste on the internet opens the door to understanding the meaning and appeal that classical music *does* have today, allowing us to see beyond the rhetoric of doomsayers – to see classical music not merely as a cultural relic, but as a dynamic living phenomenon.

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<sup>91</sup> Greg Sandow, “A Serious Problem,” *Sandow* (22 February 2008)  
[http://www.artsjournal.com/sandow/2008/02/a\\_serious\\_problem.html](http://www.artsjournal.com/sandow/2008/02/a_serious_problem.html).

<sup>92</sup> Ibid.

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